Filtronic

Filtronic plc

Annual Report and Accounts 2019

Stock Code: FTC

www.filtronic.com

Welcome to Filtronic

Filtronic plc is a designer and manufacturer of advanced RF communications products supplying a number of market sectors, including mobile telecommunications infrastructure, defence and aerospace and public safety.

Our objective is to grow profitably by being a trusted supplier to our customers of technically advanced products that deliver value to our clients. We focus on markets where we have a deep understanding of the sector and customer requirements and where we can leverage our know-how and IP portfolio.

Our strategy to achieve this objective is:

- To nurture close working relationships with our customers to understand their needs and requirements;
- To develop class leading products in our core technology areas of mmWave transceivers, filters, tower top amplifiers and antennas;
- To develop sub-systems and solutions that meet customer specific and general market requirements;
- To expand our customer base within the markets we serve; and
- To widen the number of markets we serve.

The rapid deployment of 5G Mobile Telecommunications networks is leading to significant investment in high speed / high capacity backhaul infrastructure. Filtronic 5G backhaul transceivers are being deployed at the core of leading 5G networks.

Investment in better connected blue light services around the world continues. The need for high quality voice and data networks that are secure and independent from commercial telecommunications systems has never been greater. The public safety market demands high reliability equipment for its mission critical networks and Filtronic has become a trusted supplier to this sector.

Advanced RF technologies are essential in communication and radar systems utilised by today's defence forces. Filtronic offers design and manufacturing services at our UK facilities that are valued by leading defence contractors.

In addition to providing products and services to our established markets, Filtronic is at the vanguard of designing and supplying RF technology to emerging markets ranging from 5G test equipment, ultra-low latency RF connections for the financial services industry, gigabit Internet connections to high-speed rail networks and long-range data links to high-altitude pseudo satellites ("HAPS").

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Our business ethos is to be agile and responsive to customer needs and we operate with a high degree of delegated authority and empowerment.

Glossary

3GPP:	The 3rd Generation Partnership Project
4G:	4th Generation mobile networks
5G:	5th Generation mobile networks
Backhaul:	The portion of a hierarchical telecommunications network that comprises the intermediate links between the core network and the small subnetworks at the edge of the network
CAGR:	Compound Average Growth Rate
C-RAN:	Centralised (or Cloud) - Radio Access Network: A centralised, cloud computing-based architecture for radio access networks that supports 2G, 3G, 4G, 5G and future wireless communication standards
E-band:	71GHz to 86GHz
EBITDA:	Earnings Before Interest, Taxation, Depreciation and Amortisation
eCPRI:	Enhanced Common Public Radio Interface
EMEA:	Europe, the Middle East and Africa
ETSI:	European Telecommunication Standards
ExaByte:	One quintillion bytes
FDD:	Frequency Division Duplex: a telecommunications duplex indexing method
Fronthaul:	The portion of a C-RAN telecommunications architecture that comprises the intermediate links between the centralised radio controllers and the radio heads at the edge of a cellular network
GHz:	Gigahertz: 10^9 Hertz
Gigabit:	10^9 bits
HAPS:	High Altitude Pseudo-Satellites
ISG:	Industry Specification Group
IoT:	Internet of Things
IP:	Intellectual Property
LAA:	Licensed Assisted Access
LBITDA:	Loss Before Interest, Taxation, Depreciation and Amortisation
LEO:	Low Earth Orbit
LMR:	Land Mobile Radio
LTE:	Long-Term Evolution
MHz:	Megahertz: 10^6 Hertz
Midhaul:	The link in a telecommunications network between the controller or the radio head that feeds the next link in the network
MIMO:	Multiple-Input, Multiple-Output
mMIMO:	Massive Multiple-Input, Multiple-Output
mmWave:	Millimetre Wave
MWT:	Millimetre Wave Transmission
MNO:	Mobile Network Operator
Mobile PC:	Defined as laptop or desktop PC devices with built-in cellular modem or external USB dongle
Mobile router:	A device with a cellular network connection to the internet and Wi-Fi or ethernet connection to one or several clients (such as PCs or tablets)
ODU:	Outdoor Unit
OEM:	Original Equipment Manufacturer
P25:	Project 25: a suite of standards for digital mobile radio communications designed for use by public safety organisations
RET:	Remote Electrical Tilt
RF:	Radio Frequency: a rate of oscillation in the range of around 3kHz to 300GHz
Smartphone:	Mobile phones with data processing capabilities, e.g. iPhones, Android OS phones, Windows phones but also Symbian and Blackberry OS
TDD:	Time Division Duplex: duplex communication links where uplink is separated from downlink by the allocation of different time slots in the same frequency band
TRM:	Transmit Receive Module
TTA:	Tower Top Amplifier
UWB:	Ultra-Wide Band
V-band:	57GHz to 71GHz
Wi-Fi:	Technology to enable wireless internet
X-haul	Collectively, backhaul, fronthaul and midhaul

Strategic report

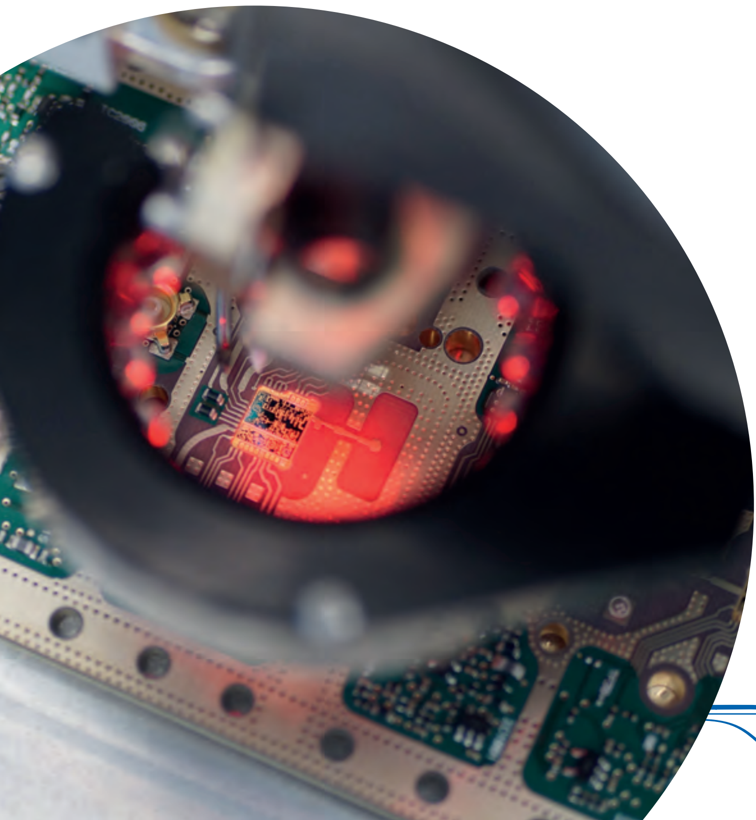
Financial highlights

	2019	Restated 2018
Sales revenue	**£15.9m**	£21.6m
Earnings before interest, taxation, depreciation and amortisation	**£0.7m**	£3.6m
Operating profit	**£0.2m**	£3.2m
Profit before taxation	**£0.1m**	£2.7m
Basic (loss)/earnings per share	**(0.63)p**	0.59p
Diluted (loss)/earnings per share	**(0.63)p**	0.59p
Net cash balance at 31 May	**£2.5m**	£3.6m
Cash inflow (used in)/from operating activities	**£0.0m**	£1.8m

Please note: 2018 numbers have been restated to reflect the ongoing continuing business with Telecoms Antenna Operations moved to discontinuing operations in line with IFRS 5.

Operational highlights

- Strong demand for 5G backhaul products
  - Over £10m of order intake for Orpheus for delivery in FY2020
  - Production capacity and capability increased at the Sedgefield site to meet rising demand
- Public safety market product offering and engineering capability extended
  - Engineering team strengthened in Leeds to capitalise on these opportunities
- Final settlement of the warranty claim settled at $2m (£1.6m) with the balance sheet impact reflected in note 24. The warranty claim will be paid out of existing cash resources over four instalments
- Progression of the divestment of the Telecoms Antenna Operations following a comprehensive strategic review



Pictured: Automatic wire bonder

Chairman's statement

Dear fellow shareholder,

Welcome to the Filtronic plc Annual Report for the year ended 31 May 2019.

The financial year proved to be both challenging and rewarding and despite setbacks associated with our Telecoms Antenna Operation, both in terms of drastically reduced demand for mMIMO antennas and warranty claims, we exit the year with renewed optimism on the back of strong demand for our 5G backhaul, public safety and defence and aerospace offerings.

5G backhaul demand has been strong and during the past few months we have built up a sizeable order book for which we have been scaling up production. Additionally, we saw production of the first two defence contracts previously announced fully ramped. The combination of these two events saw us approaching capacity at our Sedgefield facility and we have committed the funding to increase our manufacturing capability ahead of further growth in demand.

Substantial progress has been made by Filtronic's executive team to refine and implement a strategy to address the changes in the markets we operate in and it is pleasing to see us build on established customer relationships as well as making good progress to expand the markets we serve.

As previously announced, we have decided to sell our Telecoms Antenna Operations. We have concluded that to be successful in this consolidating market requires a greater scale of organisation to compete with the much larger competitors now operating in this part of the market. Consequently, we will report this part of our business as a discontinuing operation.

Financial performance summary

Group sales for the year from continuing operations were £15.9m (2018: £21.6m) and an operating profit of £0.2m was achieved (2018: £3.2m). Earnings before interest, taxation, depreciation and amortisation ("EBITDA") was £0.7m (2018: £3.6m).

The Group had net cash of £2.5m at the end of the financial year (2018: £3.6m). The cash reduction in the year is due to the investment in internally-generated development costs and plant and equipment. The Group maintains an invoice discounting facility in the UK with Barclays Bank plc of £3.0m that was undrawn at the year-end (2018: £nil). We have a further financing agreement with Wells Fargo Bank for an invoice factoring facility in the United States of $4.0m that was also undrawn at the year-end (2018: £nil).

Dividend

No dividend is proposed for the year (2018: £nil). The Board continues to be of the opinion that shareholders are better served by cash being retained by the company to fund future opportunities.

Board composition

We were delighted to announce the appointment of Pete Magowan to the Board during the year. Pete has brought a fresh perspective to the business and his sector experience and capital markets knowledge are proving invaluable as we look to develop the business.

Outlook

Filtronic has entered the new financial year with a strong order book for both 5G backhaul and defence and aerospace related products. With a major investment program in new capital equipment on schedule, significant upside potential available from public safety markets and a disposal process for our Telecoms Antenna Operations underway, the Group is looking forward with considerable optimism.

Uncertainties continue to surround the terms and timing of the United Kingdom's exit from the European Union and whilst operationally we have taken action to mitigate currently foreseeable disruption, it is not possible to predict all eventualities. The biggest impact we currently anticipate and are indeed witnessing, is in relation to foreign exchange, as the Group manages a surplus of US dollars through operating in global markets.

Finally, I would like to thank our shareholders for the considerable patience they have shown as we restructure the Group, to our customers for their continuing faith in Filtronic and to our employees for their hard work throughout an incredibly busy year.

Reg Gott
Chairman
14 November 2019

Chief Executive's review

Following the announcement of Rob Smith's resignation as a director of the Company I have taken on the role of Executive Chairman whilst we seek to recruit a new Chief Executive Officer.

FY2019 proved to be a pivotal year for Filtronic and FY2020 has started well with strong order intake on the 5G backhaul product.

After considerable investment in developing mMIMO antennas for our lead OEM customer it was frustrating that the consolidation in the US Mobile Network Operator ("MNO") market changed capital spending priorities. This resulted in a significant shortfall in our planned revenues for the year and triggered our decision to divest our Telecoms Antenna Operations. The warranty claim that arose during the year, relating to an antenna product shipped in 2016/17, exacerbated our challenge and whilst the final settlement is capped at £1.6m we are grateful for the constructive way this issue was approached by our customer and the efforts that were taken to mitigate the scale of the final settlement.

Whilst we faced challenges with our Telecoms Antenna Operations, we saw good performance in our continuing operations. Demand for 5G backhaul products was healthy in FY2019 and has accelerated in FY2020 with a succession of orders received. Currently, year to date sales plus order book for these products exceeds £10m. Sales of filters and combiners to the public safety market continue to be good and we have worked hard to gain further access to this market over the past 18 months. This has opened up a number of opportunities for us and we commenced a new product development program in FY2019 with the first new products being released at the end of the calendar year. Sales to our leading defence and aerospace customer were strong throughout FY2019 and we anticipate further growth in this sector in FY2020.

Our strategy and markets

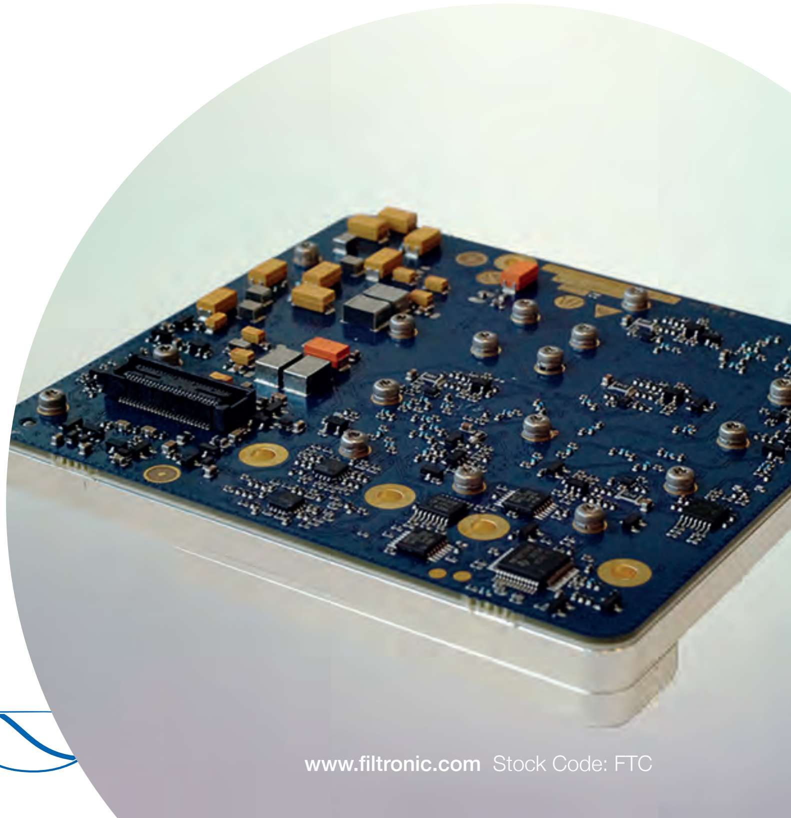
Having decided that it is in the best interest of our stakeholders to sell our Telecoms Antenna Operations, considerable thought has gone into how we move forward as a business. Our simplified operating structure and reduced geographic footprint will enable us to clarify our strategy and underscores our long-term objective of serving markets that value our know-how, IP and ethos of working in partnership to create better technical and commercial solutions that meet our customers' needs.

At our core, Filtronic is a specialist designer and manufacturer of advanced RF products that transmit, receive, condition and manage radio waves. We sell to markets that demand advanced and highly reliable products and solutions that add value to our customers' offerings. Our deep know-how of RF products, from fundamental design principles to advanced manufacturing techniques, has made us a "go-to" supplier for leading US tech companies and major European OEMs.

The objectives within our strategy to achieve this are:

- To nurture close working relationships with our customers to understand their needs and requirements;
- To develop class-leading products in our core technology areas of mmWave transceivers, filters, tower top amplifiers and antennas;
- To develop sub-systems and solutions that meet customer specific and general market requirements;
- To expand our customer base within the markets we serve; and
- To widen the number of markets we serve.

The main markets that our ongoing activities are currently servicing are 5G backhaul, public safety and defence and aerospace. Our product ranges include mmWave transceivers and RF conditioning products. We are targeting opportunities in other adjacent markets that include 5G test equipment, ultra-low latency RF connections for the financial services industry, gigabit per second internet connections to high-speed rail networks and long-range data links to high-altitude pseudo satellites ("HAPs"). We have achieved revenue during FY2019 in each of these target markets in the form of either product sales or development services and we are working hard to achieve further traction as these growth markets develop in the coming years.



Pictured: Orpheus, mmWave Transceiver Module

Chief Executive's review continued

5G Backhaul

Filtronic has supplied transceiver modules to the telecommunications industry for many years and we have established a reputation for quality and innovation. As an early mover to the E-band transceiver market, we have gained invaluable knowledge of the design and manufacturing techniques required at this high frequency, this has earned us an enviable reputation as a technology leader. With the introduction of 5G, a critical requirement for MNOs is the upgrade of backhaul to higher speed, higher capacity links required for this network architecture. Filtronic's advanced transceiver modules offer the speed and capacity in a fast to market package that meets the demands of 5G backhaul.

Our class-leading Orpheus E-band transceivers have been designed into several customers' ODU radios. Our lead customer has achieved considerable market success and has placed orders covering their current requirements that span the remainder of FY2020. In addition to our lead customer, Orpheus has been "designed-in" by tier-2 OEMs with order flow and forecasts from these customers also benefiting from 5G deployment.

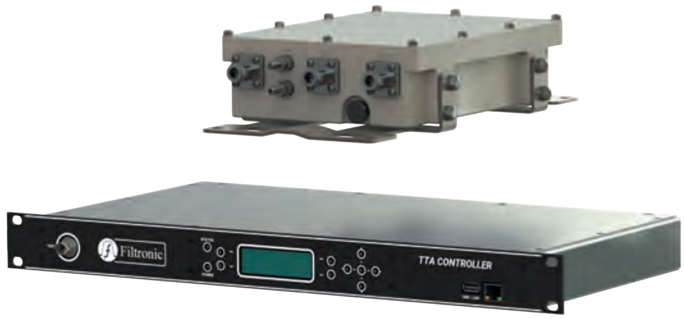
We are in the process of extending and enhancing our manufacturing capability and we are currently installing plant and equipment that will meet current and forecast demand as well as working on plans for future capacity expansion. So far, we have committed to capital expenditure in FY2020 of approximately £1.0 million and we are further reviewing our longer-term needs. This investment will not only increase our capacity but the move to the latest generation equipment will allow us to improve production yields and product quality at the Sedgefield facility.

In addition to investing in our manufacturing capabilities, we continue to advance our product development and we have planned an important new product update for later in FY2020 and have commenced work on next-generation products that will be required in two to five years. The 5G backhaul market is moving rapidly, and we are determined to maintain a leading position in this sector.

Public Safety

Over the past ten years, Filtronic has established itself as a key supplier to the largest Western OEM in the public safety market. Our focus has been on supplying high reliability filters and combiners that meet our customer's demanding specifications.

Over the past two years, we have worked hard to increase our knowledge and understanding of our customer's



Pictured: Tower Top Amplifier and TTA Controller Unit

future needs and requirements and as a consequence of the knowledge gained, we have launched several initiatives to better support them and to grow our sales into this market.

In FY2019 we commenced development of a new product family of Tower Top Amplifiers that not only meets our customer's specifications but brings an array of advanced functions and features that differentiate our solution from the competition. Our intelligent product is based on the latest generation of processors and seamlessly connects processing and functions at the tower top to the base station. The Tower Top Amplifier has been released in October 2019 for qualification and we are about to commence development of further exciting new products for this market.

In addition to product development, we have initiated a process to "on-shore" production of all products for the US public safety market to our facility in Salisbury, Maryland. This is in part a countermeasure to increased tariffs on Chinese made products and also a recognition that "Made in the USA" has significant value and importance to this market. We anticipate the completion of our production move to the USA in H2 FY2020. Whilst there is some remodelling required of our facility in Salisbury, these costs are relatively minor in relation to the value of the business.

The products we have developed and are working on, are designed to be customer agnostic and we have targeted winning more customers in this important industry sector.

Defence and aerospace

During FY2019 we continued to fulfil contracts that were awarded in FY2017 and FY2018. In addition to these core programmes we have won additional elements of these projects. The current contracts still have a number of years to run and we are positioned well to win follow-on orders as they flow down from prime contractors to the supply base.

Our know-how in volume manufacture of high frequency transceivers was critical to winning this work and as we enhance our production capabilities our capacity to win and execute additional contracts of this type will increase.

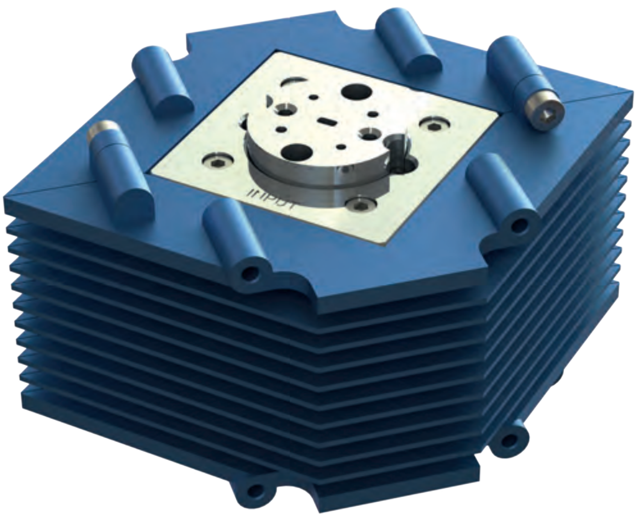
We continue to develop our relationship with our main customer in this sector and to develop other clients, having won some smaller contracts with other leading, UK based, defence prime contractors. Project gestation periods in this sector are typically long, however, we are working hard to build our exposure to this marketplace and have made some good inroads in developing relationships.

The future: a new look, a new focus and fresh opportunities

When we exit Telecoms Antenna Operations, we will be a leaner more focussed organisation and we will refresh our marketing and branding to reflect this. We have recently re-launched our website and we are working hard within the industry to communicate an invigorated and contemporary image that matches our reputation for innovation in RF.

With a strong order book, the outlook for FY2020 is encouraging and our challenge through the year is to introduce additional capacity to enable further growth. The markets we serve are seeing healthy expenditures and are generally buoyant. Beyond our currently served markets we are looking to progress by targeting high growth sectors that value our IP and know-how.

Reg Gott
Chairman
14 November 2019



Pictured: Cerus E-band Power Amplifier

Market review

Filtronic serves a number of markets with advanced RF communications equipment, the main markets being mobile telecommunications infrastructure (X-haul), public safety and defence and aerospace. In addition to these markets we have targeted other key sectors where we can add value through leveraging our IP and know-how.

Mobile telecommunications infrastructure (X-haul)

With the intended sale of the Telecoms Antenna Operations our main focus on the telecoms market is X-haul.

X-haul is a collective term that covers front, mid and backhaul representing the various connections between the edge of network, remote radio heads and the core fibre network. X-haul has historically been achieved through fibre links or wirelessly, typically at frequencies below 23GHz. With the introduction of 5G networks, and the envisaged increase in data traffic, existing wireless links are being upgraded to E-band. Additionally, the higher frequencies being utilised for network access (device to network connection) result in lower range and consequently a requirement for more cell sites which is driving up the overall market size for X-haul links.

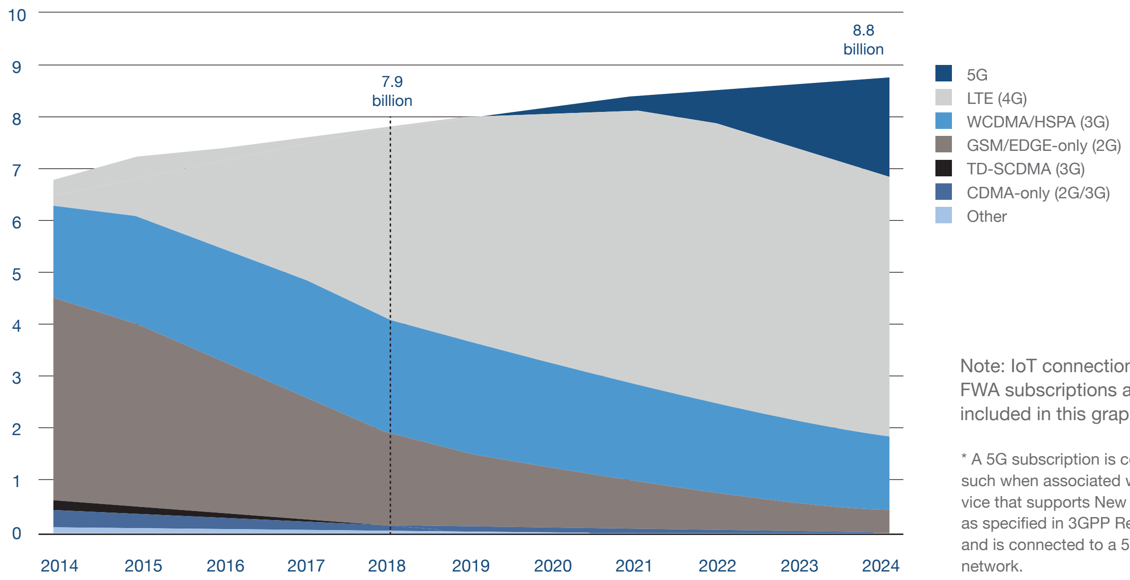
The Ericsson Microwave Outlook Report 2018 states that, globally, wireless backhaul is likely to account for approximately 40 percent of backhaul connections and if China, Taiwan, South Korea and Japan are excluded, this figure rises to 65 percent. Different jurisdictions are taking varying approaches to licensing for E-band, ranging from a light touch to an auction approach, with the majority of countries taking the view of reducing licensing, to encourage 5G deployment.

Wireless technology is a well-established backhaul technology and has been used in mobile networks for decades. To a large extent, LTE's success has been built on the capacity, flexibility and short roll-out times that wireless microwave enables.

Fibre optic presence in networks has increased in the recent past and this trend will continue as MNOs exploit the technology's advantages. Nevertheless, wireless X-haul is a key enabler for 5G use cases, based on the following factors:

- Fibre is not ubiquitously available, especially in suburban/rural areas. In addition, in urban areas, if the MNO is not an incumbent, fibre leasing may be too expensive.
- In current mobile networks, wireless is used in more than 50 percent of cell sites. Replacing existing lower frequency wireless backhaul with fibre is not economically viable and therefore upgrading to E-band links is the most effective way to increase capacity.
- When a fibre Point of Presence (PoP) is a few hundred meters away from the radio access point, total cost of ownership evaluation tends to favour wireless connectivity. The cost of fibre trenching is unlikely to reduce over time whereas wireless costs are reducing, and performance is improving.
- In dense urban environments it is common to have fibre access at building level, but not at street pole level.
- E-band backhaul technology can address 5G's challenging capacity and latency requirements. Propagation medium induced latency depends on the density of the medium, so the latency of a wireless connection is fundamentally lower than that of a fibre cable of the same length. Consequently E-band as a backhaul solution is more attractive for low latency-critical applications such as financial markets networks.

Mobile subscriptions by technology (billion)



Note: IoT connections and FWA subscriptions are not included in this graph

* A 5G subscription is counted as such when associated with a device that supports New Radio (NR), as specified in 3GPP Release 15, and is connected to a 5G-enabled network.

- Mission-critical applications (e.g. public safety) require high resiliency network performance. Wireless connectivity is generally more reliable than fibre during major events such as earthquakes, fire, or simple road maintenance. Moreover, in these cases, the recovery time is much faster with a wireless connection.

In summary, the deployment of 5G networks is a major driver for the deployment of wireless, E-band backhaul products. The technical and economic advantages of E-band over fibre have now been established and accepted and Filtronic is seeing rapid growth in demand for its 5G Backhaul transceivers.

Filtronic's approach to the 5G backhaul market

Filtronic differentiates itself from other players in the 5G backhaul market by offering transceiver modules that can be matched to customer designed or industry standard modems for incorporation in ODUs. This approach allows our customers to focus on their core competencies and results in reduced time to market and lower overall development costs.

Filtronic's Orpheus transceiver modules incorporate our own design chipsets that offer class-leading performance. However, we are truly device agnostic and have worked with clients to incorporate their preferred chipset solutions. This is of particular advantage to our clients as device manufacturers do not offer modularised products that can be incorporated into final systems.

Whilst there are alternatives in the market and some OEMs have chosen to develop in-house design and manufacturing capabilities, Filtronic's unique approach has allowed us to create a differentiated offering that has significant flexibility, cost and time to market advantages over other solutions. Furthermore, our class-leading chipsets mean that our 5G backhaul products continue to offer significant performance advantages.

Public safety networks

Public safety networks are communications networks operated for emergency services. Historically these services have been run on separate infrastructure to commercial mobile phone networks to provide secure and dedicated communications.

There are two main international standards deployed. In North America, Project 25 ("P25") has been widely deployed and in Europe and the rest of the world Terrestrial Trunked Radio ("TETRA") is the most common standard.

Filtronic has traditionally focussed on the North American market where market dynamics and the demand for higher resilience and longer range have allowed us to differentiate our products.

Overall expenditure on public safety networks continues to be good as emergency services look to expand coverage and upgrade from older FM analogue networks. Product life cycles in this industry tend to be significantly longer than in commercial mobile phone networks and therefore return on investment cases are more attractive for Filtronic.

Historically the public safety market has placed considerable merit on the quality of voice services compared to data and therefore networks have tended to be narrow band. This dynamic is changing as emergency services become increasingly data-driven and the need for live video feeds from body cameras etc. is leading to increased interest in broadband networks and the adoption of 4G standards.

Filtronic's approach to the public safety market

Filtronic has concentrated on supplying mission-critical filters and combiners to the North American P25 market and has established a strong relationship with the leading OEM in this sector. In FY2019, we decided to make a concerted effort to widen our product offering to this sector to capitalise on our relationship and standing in this marketplace.

To this end, we have developed and launched a range of Tower Top Amplifiers (TTAs) and have other products in development that will be launched in the coming 12 months. Our TTA products have been designed to be OEM agnostic and will be marketed under our own brand. In addition, we have been commissioned by our customer to design and develop high-reliability filters suitable for 4G public safety networks that will emerge over the coming years.

Filtronic has also worked closely with our lead customer to develop a plan to "onshore" manufacturing of public safety products to our facility in Salisbury, Maryland. This is in response to the imposition of tariffs on Chinese made products and also reflects long-term security concerns related to Chinese made products in critical national infrastructure.

Overall the public safety market continues to show good levels of investment and our strategy is to deepen our customer relationship and introduce a broader product range to maximise our opportunity in this sector.

Defence and aerospace

Filtronic historically has been a supplier of RF components and sub-systems to the UK defence and aerospace industry. In recent years we have won and are currently delivering on contracts to supply transmit and receive modules (TRMs) for airborne radars. The programs that we are involved in are for two different aircraft types. As the aircraft manufacturers flow-down contracts

Market review continued

to the supply base, Filtronic is well positioned to participate in follow-on business. It is also likely that upgrades to existing aircraft fleets will be made to extend the operational life of aircraft already deployed and these upgrades will include latest generation radars.

After several years of reductions in defence budgets, increasing geopolitical instability is leading to increased spending. Furthermore, spending on equipment is being driven by technology advances that demand more sophisticated RF solutions.

Filtronic's approach to the defence and aerospace market

Filtronic's targeted market in defence and aerospace is the manufacture of customer designed TRMs and associated RF components and sub-systems where our engineering and design capabilities can add value. By focusing on TRMs and associated sub-systems Filtronic can leverage our advanced, automated, volume manufacturing capabilities that are typically not offered by western suppliers outside of the USA.

The market for land-based and naval radars is relatively small, but each system requires significant numbers of TRMs. Airborne radars offer greater volumes and have the added technical demands of low weight and the abilities to withstand high G-force. We are also engaging with missile system manufacturers as these applications demand significant volumes of TRMs and also have challenging technical specifications.

Other growth markets

We continue to develop opportunities in other adjacent markets and in particular for E-band applications. These include low latency private networks for financial markets, trackside to train gigabit wireless links, 5G handset test systems and HAPS systems.

Low latency private networks

Filtronic has designed and supplied customised versions of Orpheus E-band links to a customer supplying the financial services markets. Low latency financial networks are becoming recognised as an essential part in reducing transaction times in automated high-speed trading systems where time is money.

Trackside to train communication links

The provision of high speed, high capacity links to trains presents a number of interesting technical and commercial challenges. The provision of data and voice services to passengers has received increasingly high profile as customer expectations for good internet connection has increased with services, such as streaming video, delivered over 4G networks. Filtronic has partnered with a niche ODU manufacturer in a major trackside to high speed train evaluation project in Asia. This evaluation project is currently being scaled and whilst there is no certainty that the proposed system will be adopted, the market possibilities are substantial.

5G handset test systems

The next generation of mobile handsets is being designed to operate at higher frequencies being utilised by 5G networks. Filtronic's knowhow of high-frequency RF design has enabled us to provide sub-system design and manufacture services to a key provider of test equipment to semiconductor manufacturers servicing the handset market. In FY2019 we were commissioned to design, develop and supply an evaluation system that we hope will go into production in calendar year 2020.

High-altitude pseudo satellites/low earth orbit satellites ("LEO")

In recent years there has been considerable work undertaken to develop airborne communications networks that overcome the limitations of terrestrial networks. A number of challenges exist in designing these systems amongst which is the development of communications links that deliver sufficient bandwidth and range to provide internet services. Filtronic has engaged with a number of organisations in this market and has been commissioned to develop proof of concept long range E-band links based on our core Orpheus products. To date, we have developed and sold sub-systems to customer specification to major West Coast, USA technology companies where we are developing a reputation for being a "go-to" mmWave specialist.

Whilst we believe that commercial deployments of HAPS and LEO satellites are some way off, we continue to position ourselves to participate in this market segment as part of our future growth strategy.

Objective and strategy

Filtronic plc is a designer and manufacturer of advanced RF communications products supplying a number of different market sectors, including mobile telecommunications infrastructure, defence and aerospace and public safety.

Our objective is to grow profitably by being a trusted supplier to our customers of technically advanced products that deliver value to our clients. We focus on markets where we have a deep understanding of the sector and customer requirements and where we can leverage our know-how and IP portfolio.

Our objectives within the strategy to achieve this are:

- To nurture close working relationships with our customers to understand their needs and requirements;
- To develop class-leading products in our core technology areas of mmWave transceivers, filters, tower top amplifiers and antennas;
- To develop sub-systems and solutions that meet customer-specific and general market requirements;
- To expand our customer base within the markets we serve; and
- To widen the number of markets we serve.

Product strategy

Filtronic designs, manufactures and supplies technically advanced RF products that transmit, receive, condition and manage radio waves.

Our product range and wider technology capabilities are rich in IP and know-how with over 80 patents/applications across the portfolio.

Antenna products

Filtronic antenna products encompass a range of ultra-wide band small cell and macro base station antennas covering frequencies from 600MHz to 5GHz and are offered in band combinations that service auctioned spectrum in the USA and EMEA.

In addition, we work closely with customers to develop advanced products to meet their specific requirements.

Filter products

Filtronic's filter products cover a range of product classes, with solutions to support a variety of current and future requirement. Our filters and combiners are designed to meet exacting operating specifications and are designed for resilience in critical communications applications.

mmWave 5G transceiver products

Filtronic's mmWave transceiver products are based around our class-leading, high-capacity, E-band transceivers technology and have been optimised for 5G mobile backhaul and wireless link applications such as trackside to train and HAPS/LEO ground to air communication.

Tower top amplifiers

TTAs are used in many mission-critical public safety LMR systems to enhance the received signal strength and quality. This receive-only system consists of low-loss, high rejection filters coupled to low noise amplifiers with a high level of built-in redundancy. Filtronic's solution employs a separate control unit based on the latest technology that monitors overall system performance and distributes the received signal to multiple separate receivers.

Organisational overview

It is Filtronic's intention to divest its Telecoms Antenna Operations. This will encompass Filtronic's operations in Täby, Sweden and Suzhou, China.

Looking to the future Filtronic will operate from three sites, Leeds and Sedgefield in the UK and Salisbury, Maryland, USA. The activities for each site are as follow:

Leeds, UK

Head office and engineering function for Filters, TTAs and associated RF systems and sub-systems.

Sedgefield, UK

Transceiver manufacturing, microwave and mmWave engineering, European sales and central services.

Salisbury, MD, USA

North American sales, service, repair and manufacturing of public safety products.

Objective and strategy continued

Business ethos

Our business ethos is to be agile and responsive to customer needs and we operate with a high degree of delegated authority and empowerment.

Filtronic complies with internationally recognised standards covering issues such as anti-bribery and corruption, child labour, modern slavery and conflict materials. Details of our policies may be found on our website at www.filtronic.com

Our people

Filtronic firmly believes that it is our people who drive the success of our business. We have diverse, experienced and highly qualified teams, focused on delivering outstanding products and service to our customers.

Filtronic has a depth of engineering skills across its product portfolio. The mmWave transceiver team, based in the UK, has seen continuous development since 1997, whilst the filter team has expertise dating back to 1992, including unique expertise, know-how and design reputation in electronically reconfigurable filters. We continue to seek new engineering talent to enhance our design capabilities and further support growth opportunities.

What can mmWave do for 5G backhaul?

by Mike Geen,
Chief Scientist – mmWave Technology, Filtronic

The challenges of implementing 5G radio access have been widely discussed, yet a similar revolution will be needed in the technology that connects it to the core. As the first 5G networks are rolling out, network architects are seeking the highest capacities and data speeds possible for backhaul, in a format that can be rapidly and flexibly deployed wherever it is needed. The backhaul segment of the network is traditionally made up of the intermediate point-to-point links between the core (or backbone) network and the small subnetworks at the network edge where the base stations are. Since 5G is aiming for multi-Gbps data rates for subscribers, all of this data will need to be backhauled at much higher rates too.

As well as the evolution that is occurring in the air interface, the radio access network (RAN) is itself evolving, with its functions being 'decomposed' into a number of different locations. In 4G LTE, distributed RAN (D-RAN) and cloud (or centralised) RAN (C-RAN) respectively have allowed a remote or centralised baseband unit (BBU) to be used, connected to the remote radio unit (RRU) via an eCPRI 'fronthaul' interface. In 5G the BBU will further be split into a distributed unit (DU) and one or more central units (CU), and these will be connected using a 'mid-haul' link. Collectively all these types of link are known as X-haul.

Now more than ever, a wireless solution rather than fibre will be the obvious choice for X-haul. Already in Europe around 50% of backhaul between the edge and the core network is wireless, and in some countries like India, the proportion is much greater than this. With the higher densities of small cells that will be needed for 5G, this share is set to increase rapidly. Not only is wireless backhaul quicker and simpler to deploy, it is much more cost-effective too. Laying new fibre typically costs between $35,000 and $100,000 per kilometre, whereas the cost for a wireless link is an order of magnitude lower. Furthermore, in a complex urban environment, it can often be impossible to lay new fibre exactly where it is needed.

The traditional bands for wireless backhaul between 6GHz and 42GHz have served us well for 3G and 4G. However, they would struggle to meet the needs of 5G, where the dual requirements of higher data rates and increased capacity mean that much higher bandwidths will be required.

The obvious way to achieve the additional bandwidth required is to move higher up the spectrum into the mmWave bands, and this will be particularly effective in urban environments where link distances are relatively short. In the existing bands, there are a number of narrow channels — the total bandwidth available for mobile backhaul below 42GHz is just 15GHz. This is now being heavily used, and expensive licences are required to operate in these bands. In contrast, the mmWave bands above 50GHz will provide over 20GHz of additional bandwidth in large chunks, allowing very high data rates to be achieved. Some of the traditional wireless bands — notably 26GHz and 28GHz — have an uncertain future for backhaul, since they are now being targeted for 5G radio access. ETSI's mWT ISG has expressed its concern about the need when allocating mmWave bands for 5G to consider the ability of operators to continue operating backhaul for their 3G and 4G networks as well as for the future 5G ones.

The main mmWave bands for telecom transport are V-band (57 – 71GHz) and E-band (71 – 86GHz). There is even some interest for the future in W-band (92 – 114.25GHz) and D-band (130 – 174.8GHz) but working at such high frequencies can introduce additional technical and manufacturing challenges.

In 2015, just 0.2% of fixed wireless links were at V-band and around 2% at E-band. E-band, however, is increasing its share very rapidly—by 2018 E-band accounted for around 7% of links, and as it is now accepted as an essential element in 5G transport networks, this trend is forecast to continue with year on year growth rates of around 30%.

The licensing situation for V-band has restricted its development. Although V-band may seem attractive because it is licence-free in many countries, operator concerns over interference and availability have hampered its application for mobile backhaul. V-band is however finding a place in multipoint-to-multipoint meshed networks in dense urban scenarios, where each network element, with beam-steerable antenna, could be reached by more than one direction by other equipment. This is helped by the extension of the licence-free band to 71GHz, which provides more bandwidth and better propagation characteristics.

At higher frequencies, it is necessary to take atmospheric attenuation into consideration. There are well-characterised bands where absorption by water and oxygen molecules can be a problem, and rain attenuation increases rapidly with frequency up to around 70GHz, after which it begins to flatten out. Nevertheless, system simulations carried out by the ETSI mWT ISG (GR mWT 008) suggest that link distances of several hundred metres are practical at D-band frequencies with antenna sizes comparable to those at E-band.

Broader contiguous bandwidth allocations are not the whole story. Capacity and throughput can also be increased by techniques such as: network topology changes (densification, RAN sharing, increased fibre penetration from the core to the edge) shorter link distances utilising star topologies from the fibre aggregation point and increasing channel width in the traditional bands by the use of carrier aggregation. Combining carrier bandwidth from different parts of the spectrum not only offers an increase in the total bandwidth available to use but can also ensure availability where one band has superior propagation characteristics, allowing longer links. Several aggregation scenarios are now either being deployed or being proposed for future deployment: two or more of the traditional microwave and sub-6GHz bands, offering 1 – 5Gbps; a microwave band (15GHz, 18GHz or 23GHz) plus E-band, providing up to 10Gbps; and in the future, E-band plus D-band can provide up to 100Gbps.

Higher order modulation techniques can also increase data rates, but these demand higher signal-to-noise ratios and very linear components in order to keep error rate to a minimum. Multi-channel systems like XPIC (cross-polarization interference cancelling) and line-of-sight MIMO have also been demonstrated to provide enhanced data rates, but with a need for more expensive radio equipment.

In considering all these factors, we believe that wide-bandwidth mmWave radios provide the optimum solution to meet the increasing capacity demands for backhaul and other types of transport in next-generation communications system. mmWave links currently have the ability to give fibre-like capacity — up to 40Gbps in multichannel configurations — and, with carrier aggregation, can operate at high capacity up to 10km. With a proven E-band technology platform, a rapid, low-risk transition from high-performance short-range terrestrial links to the highest capacity long-range links has been made possible. New spectrum allocations above 95GHz will provide a path to even higher capacities in the future.

Strategic report

Financial review

Whilst the continuing business remains profitable with numerous exciting near-term opportunities on which to capitalise, the challenging trading environment of antennas led to a disappointing loss in the period and the decision to commence a sale process for the Telecoms Antenna Operation.

Revenues

Sales revenue for the Group from continuing operations decreased in the year by 26% to £15.9m (2018: £21.6m). The decrease is a result of our previously announced strategic withdrawal from low margin telecom filter business and an exceptional short-term revenue opportunity that we benefitted from in the public safety market in FY2018. Despite the reduction in revenue it was very encouraging to see year-on-year growth in two of our core markets; mmWave telecoms and defence. Output of our market-leading Orpheus product increased significantly over the year to meet growing demand from our lead OEM customer which also enabled us to take a strong order book into FY2020. The Orpheus order book has increased by 288% at 31 May over the prior year which has subsequently increased to 1,088% at the end of September 2019.

Sales of defence products also saw year-on-year growth, where revenue to our lead customer continued to increase as throughput on two of our contracts reached full capacity. These long-term defence contracts provide more certainty over future revenues and align to our objective of broadening the markets we serve with a better quality of earnings.

The new revenue standard IFRS 15 'Revenue from Contracts with Customers' came into mandatory effect for the Group during FY2019. However, this change in the Group's revenue recognition policy has not materially impacted the value of revenue that would have been recognised under the former revenue standards, IAS 18 Revenue and IAS 11 Construction Contracts.

Operating costs

Operating costs increased in the year to £7.6m (2018: £7.0m). This was a result of enlargement of the operational team to support new opportunities and the subsequent need to increase capacity for new contract wins. This is reflected in the average headcount for the year which has increased to 100 (2018: 96).

In addition to headcount increases, we waived a debt due from an OEM customer of £0.3m relating to filter material purchased for legacy product against the customers demand forecast that never materialised which was treated as a credit loss.

EBITDA

EBITDA in the year relating to the continuing operation was £0.7m (2018: £3.6m). This reduction was a direct result of lower revenues although this was slightly offset by an improved gross margin as legacy OEM filter business was replaced by mmWave and defence contracts. Depreciation and amortisation were broadly in line with the previous year.

Reconciliation of EBITDA	2019 £000	Restated 2018 £000
Operating profit	**234**	3,199
Depreciation	**335**	367
Amortisation	**75**	78
EBITDA	**664**	3,644

Taxation

A large tax credit of £2.1m (2018: £0.0m) has been recognised for the year, as set out in note 14 to the financial statements. The Group benefits from R&D tax credits in the UK as we continue to invest in the development of advanced product and process technology. An R&D tax credit of £1.4m was recognised in the year, 50% of which relates to the previous financial year, and is included in the total credit.

A deferred tax asset of £1.0m was recognised in the period as visibility of profits in the UK and USA increased as a result both of our strategy to address markets such as defence and public safety which offer longer term predictable revenues and the existence of a robust order book to be manufactured at our Sedgefield site.

Our overseas operations continue to be profitable and consequently incur corporation tax charges which amounted to £0.3m. In the USA this comes in the form of state taxes as substantial federal tax losses carried forward remain.

Discontinued operations

Following the news of consolidation in the US Mobile Network Operator market and the impact on our Telecoms Antenna Operation a strategic review was undertaken. On completion of the review, the directors decided the best outcome for shareholders would be a sale of this part of the business. Consequently, this has been accounted for as a discontinued operation and is analysed in note 5. Sales in the period were £4.6m, primarily made up of Massive MIMO antennas, with an operating loss of £3.5m. This included an amount of £1.6m which related to a Settlement Agreement with our customer for a legacy antenna supplied in 2016/17 that had a performance issue relating to a component within the antenna.

Research and development costs ("R&D")

Total R&D costs in the year before capitalisation and amortisation of development costs were £1.2m (2018: £1.7m). The Group saw a reduction in R&D spend year-on-year as the business reorganisation in the previous year saw some of the resource classified as engineering reallocated to augment activities related to the sales function and product test development. The Group remain committed to investment in R&D for the future growth of the business through new and enhanced products to meet the expanding demands of customer programmes. Key areas of expenditure in the year included progression of the mmWave technology roadmap and product development into adjacent markets such as 5G test equipment and HAPS which we anticipate will deliver significant future revenue opportunities.

The Group capitalises its development costs in line with IAS 38 as set out in note 2 to the financial statements. A reconciliation of R&D costs before capitalisation and amortisation can be seen in the table below:

Reconciliation of R&D costs	2019 £000	Restated 2018 £000
R&D costs in income statement	**1,026**	1,730
Capitalisation of development costs	**250**	-
Amortisation of development costs	**(38)**	(33)
R&D costs before capitalisation and amortisation	**1,238**	1,697

Capital expenditure

Capital expenditure of £0.4m (2018: £0.6m) related to new equipment to support and improve our operational capability to manufacture defence-related products in Sedgefield and to increase capacity at our service and repair centre in the USA.

Inventory provision

Inventory is valued at the lower of cost and net realisable value. It is the Group's policy to regularly review the carrying value of its inventories and to make a provision for excess and obsolete inventory. As at 31 May 2019, the inventory provision was £1.1m (2018: £1.2m).

Assets held for sale

IFRS 5 requires a company to present an asset held for sale where management is committed to a plan to sell a business, the asset is available for sale, an active process is in place and a sale is likely within 12 months. The directors have previously announced to shareholders the intention to undertake a sales process of the Telecoms Antenna Operation and therefore, in line with IFRS 5, the assets and liabilities relating to this area of the business have been presented as held for sale.

Warranty provision

In line with industry practice, the Group provides warranties to customers over the quality and performance of the products it sells. The Group's policy is to make a provision, calculated as a percentage of sales revenue, after reviewing costs associated with faulty products returned. As at 31 May 2019, the warranty provision was £2.2m (2018: £0.4m); the increase in provision at the year-end reflecting the Settlement Agreement with our customer for a performance issue on a legacy antenna relating to a component used.

Funding and cash flow

The Group recorded a decrease in cash and cash equivalents to £2.6m (2018: £3.8m) at the year-end due to investment activity.

Cash generation from operating activities in the year was £0.0m (2018: £1.8m). However, the Group invested £1.1m (2018: £1.1m) in capital expenditure and internally generated intangible assets which accounts for the reduction in the cash position. The full breakdown of this movement can be seen on the consolidated cash flow statement.

Net cash at the end of the period was £2.5m (2018: £3.6m) being £2.6m cash and cash equivalents and £0.1m of interest-bearing borrowings from the bank loan.

To provide additional cash headroom Filtronic has a £3.0m invoice discounting facility with Barclays Bank plc in the UK. As at 31 May 2019, £nil was drawn down against this facility (2018: £nil). Furthermore, the Group has an agreement with Wells Fargo Bank for an additional $4.0m invoice factoring facility to borrow against the debtors of our USA operation. As at 31 May 2019 $nil was drawn down against this facility (2018: $nil).

Michael Tyerman
Finance Director
14 November 2019

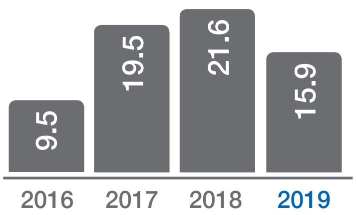
Strategic report

Key performance indicators

The Group's management team uses various Key Performance Indicators ("KPIs") to monitor the financial and non-financial performance of the business. Below are the measures and metrics which the Board believes best indicate the performance of the Group's continuing operations.

Revenue (£m)

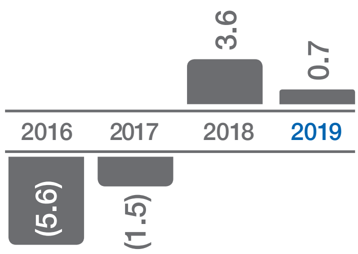
£15.9m



The total amount the Group earns from the sale of products and services.

EBITDA/(LBITDA) (£m)

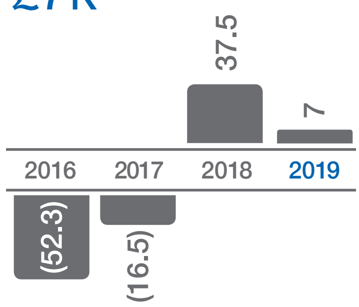
£0.7m



The Board recognises EBITDA/(LBITDA) as a key metric of the underlying health of the business.

EBITDA/(LBITDA) per employee (£k)

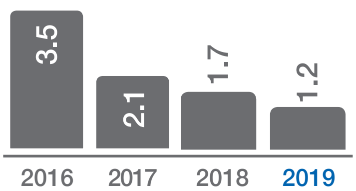
£7k



Employees are a critical asset in our business and we monitor the (LBITDA)/EBITDA per employee to measure productivity.

Research and development costs (£m)

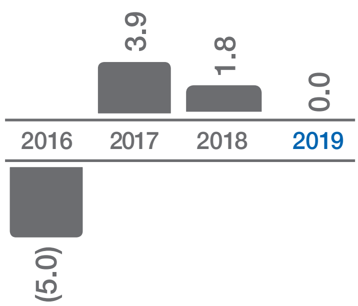
£1.2m



The Board recognises that the Group needs to invest in new products, capabilities and technologies to participate in a technology-driven market and measures the investment made in research and development.

Cash generated from/(used in) operating activities (£m)

£0.0m



The Board recognises that cash flow from operating activities indicates whether the Group is able to generate sufficient positive cash flow to maintain and grow its operations, or it may require external funding for financing.

Risk management

Effective risk management is key to our success, both in the industry that we operate in and within our chosen business model. Filtronic supplies microwave, mmWave, base station filter products and antennas for the wireless telecommunications market. The Group operates in a fast-changing sector with a small number of sophisticated customers, demanding high-performance standards and international competition, all of which pose risks to the business.

The directors recognise that risk is inherent in any business and seek to manage risk in a controlled manner. The key business risks are set out as follows:

Risk	Nature	Mitigation	Change in year
Market	We supply a range of niche products to a small number of large OEM customers as well as a number of MNOs. The loss of any of these customers, material reduction in orders from any such customer or the timing of customer project roll-outs may have a material adverse effect upon Filtronic's financial condition. With the rapid evolution of product technology and other corporate decisions, the size of our addressable market may be affected. We may also fail to forecast market movements correctly thus missing opportunities or wrongly predicting product longevity.	The Group seeks to mitigate this risk by working closely with customers, at all levels, to ensure that we are designed into their products at an early stage, enabling us to develop products that meet their specifications and requirements. Filtronic aim to provide customers with a well resourced programme and a high level of service with a focus on product quality and delivery. This gives an advantage over our competitors that has facilitated new contract wins. The sales teams are actively seeking to increase the number of contract wins across a range of products, within existing and new customers, with an encouraging order book and opportunity pipeline. In a market of rapid technology changes, it is imperative the Group chooses opportunities that will yield a good rate of return and have an extended product life. All new opportunities are appraised to ensure there is a good match between our capacity, capabilities and likely adoption in a growing market with a good rate of return.	
Manufacturing	For most of the products, production is demand led and customers may vary their requirements at short notice, which also impacts inventory management. Customers in these businesses expect consistently high-quality products, decreasing prices and rapid product ramps, hence we depend on control of our operating environment, including management of security of supply in our supply chain, the provision of correctly designed technological solutions including the achievement of target cost-reduction plans and supply of product to specified timescales. Non-performance in these areas would result in a diminished market position.	The Group's internal and outsourced manufacturing processes are accredited under ISO 9001. We manufacture and assemble at our highly automated facility at NETPark, Sedgefield, based on our core competencies, and where appropriate, we outsource non-core processes to suppliers who can offer advantages over internal supply. Investment in capital equipment, working capital and additional employees has increased production capacity and capability enabling us to ramp existing customer projects and win new business. Our antenna and filter products are manufactured by an outsourced partner who has a high degree of flexibility and a proven track record of product ramp and mass volume manufacturing, enabling us to flex volume with limited impact on our cost base and balance sheet. All of our products are provided to customers after detailed qualification testing. We work closely with our customers to ensure that the test processes employed are appropriate so all products are supplied compliant to the customer's specification.	

Strategic report

Risk management continued

Risk	Nature	Mitigation	Change in year
Technology	Our product competitiveness is heavily influenced by technology choices at product concept stage and throughout the execution of design to product launch. The market is time-sensitive and opportunities may be lost if the technology we develop is inappropriate or fails to achieve customer specifications or meet the timescales required to match market demand. For products in the production cycle, technology insertion is often required as a means of achieving price reductions, which underpin sales.	Our ability to remain competitive in terms of technology and product design is underpinned by retaining key staff and effective design methodologies. We work closely with our customers and suppliers to gain a thorough knowledge of the technology being developed in the marketplace. By staying close to the market, we position ourselves to react quickly to any technology changes that develop. When undertaking new product introductions, we follow a process which facilitates a thorough review of the engineering development at various milestones throughout the project. This methodology is designed to ensure the product has no design defects, meets the required specification and is on time to exploit the market opportunity. In order to protect our intellectual property, we maintain and apply for patents when appropriate.	
Recruitment and retention	The Group is reliant on the key skills and knowledge of its people in a range of areas especially in the engineering function. Failure to recruit, develop and retain an appropriate number of suitably qualified people in critical areas could affect our ability to design new products and meet our customers' needs. We have also benefited from a number of non-UK employees filling key roles within the business. Due to the highly technical nature of our activities, these skills are not always readily available within the UK and any restrictions on the employment of these people could have an adverse effect on the Group.	The Group has a competitive remuneration package that is reflective of market conditions for key roles and is under review as conditions change. The Group also operates a long-term incentive plan for key employees and SAYE schemes for all UK employees. We continue to invest in our engineering teams to ensure we have the right skills to execute our strategy. We also provide regular communications to all employees through communication meetings in each of our business locations along with a bi-monthly newsletter including a CEO blog giving updates about business performance. By giving our employees an understanding of our strategic direction, we believe it enables them to make meaningful contributions to the achievement of our goals.	
Financial management	The Group has specific exposure to credit risk and exchange rate fluctuations as a consequence of its global presence. A large proportion of the Group's sales are denominated in US dollars, so the Group is subject to risks associated with currency movements.	The Group has established a number of policies to mitigate these risks, further details of which are presented in note 38 to the financial statements. Predominantly, currency risk on the US dollar is managed through a natural hedge by matching the currency in which revenues is generated and the expenses incurred and forward contracts.	
Brexit	As a consequence of the UK's decision to leave the European Union, there is international uncertainty around the impact this will have on business and trade.	The Group has operations and market presence in non-EU territories such as the USA. As a result, Brexit is not expected to have a material impact on the Group, however, management continues to monitor the current economic climate regularly for any potential future impacts.	

The Board has established a continuous process for identifying, evaluating, and managing the significant risks the Group faces which has operated throughout the year and up to the date of this report. Such a system is designed to manage rather than eliminate the risk of failure to achieve business objectives and can only provide reasonable and not absolute assurance with respect to the preparation of financial information and the safeguarding of assets against material misstatement or loss.

The Board regularly reviews the effectiveness of the Group's system of internal control. The Board's monitoring covers all controls, including financial, operational and compliance controls, and risk management systems. It is based principally on reviewing reports from management to consider whether significant risks are identified, evaluated, managed and controlled and whether any significant weaknesses are promptly remedied and indicate a need for more extensive monitoring.

Corporate social responsibility report

Acting with integrity and behaving responsibly is central to the execution of our strategy and underpin our business model. This report covers how Filtronic interacts with its stakeholders, its approach to key issues and its aims for the future.

Health and safety

The Board is committed to ensuring the health and safety ("H&S") of the Group's employees and applies high standards throughout the Group in the control and management of its operations. The Board regularly reviews the Group's arrangements for the planning, organisation and control of H&S matters. Global H&S meetings are held periodically with participants from each of the Group's six sites.

Employees

The Group's success depends on its employees and the Board recognises that it is their commitment and contribution that is vital to the execution of the Group's strategy.

With an international workforce, it is important that we provide an environment where we attract, motivate and reward high quality employees, throughout the Group.

Employee development

Employee development is an important element of employee retention and motivation. The Group has an education and training policy in place which is being implemented through developing a Group-wide infrastructure to support the identification of staff development needs through meetings and staff appraisals. The aim is to provide quality staff development which supports the Group's strategic objectives, whilst simultaneously aiding talent management and succession planning. Various formal and informal training has taken place over the year, including training sessions on the Group's policies and General Data Protection Regulations ("GDPR").

Looking to the future

Filtronic continues to work towards future-proofing the business to ensure we have the right skills for the future to support business growth. The Group is cognisant of its duty to plan for the future and a succession planning exercise will begin shortly.

Employee communications

The Group believes in keeping employees fully informed on matters which affect them through various communication forums. The Group holds regular employee communications sessions at which employees can review Group progress and raise, share and discuss specific issues and concerns that affect employees with senior management. The Group publishes a quarterly newsletter which outlines developments and plans across the business.

Equal opportunities

The Group is committed to a policy of equal opportunity by which it ensures that all employment-related activities are based on merit and suitability for the job alone. Further information on our equal opportunities policy may be found on our website: www.filtronic.com/group-policies/.

Diversity and inclusion

Filtronic has diversity and equal opportunity policies to support our aim of providing equal opportunities for all without discrimination. These policies form part of the Group's core values (expected of employees, suppliers and other stakeholders). Our policies and practices emphasise the importance of treating people in a non-discriminatory manner across the full employment life cycle, including hiring, reward, development, promotions, mobility and departure. In the event that an employee becomes disabled, the Group will make reasonable appropriate adjustments, and so far as is practicable, will continue to provide employment. Training is provided to those making decisions on these factors so that no individual is disadvantaged and to prevent discrimination on the grounds of gender, religion, belief, race, creed, age, disability, sexual orientation, ethnic origin, or marital status.

The Chief Executive Officer is the board member responsible for human resources.

Human rights

Filtronic applies human rights considerations to the way it does business, for example through our supplier and anti-bribery and anti-corruption policies, our code of ethics, which is an integral part of our management policies, our practices in relation to health and safety, equal pay and employees' freedom to join trade unions. The Group has adopted a specific policy on modern slavery reflecting the obligations contained in the UK's Modern Slavery Act 2015. Filtronic is committed to ensuring transparency in our approach to tackling modern slavery throughout our supply chain.

Corporate social responsibility report continued

The environment

Care for the environment is an integral part of the Group's business activities. It is the Group's policy to ensure that its facilities are safe and the Group is committed to ensuring that its impact on the environment is minimised. The Group supports and trains its personnel to act responsibly in matters relating to the environment. The Group takes account of relevant legislation and regulations and analyses its practices, processes and products to reduce their environmental impact, and works with our customers and suppliers to achieve a high standard of environmental stewardship.

We have three sites which are certified to ISO 9001 and ISO 14001 standard: Täby, Sweden; Leeds, West Yorkshire, UK; and Sedgefield, County Durham, UK.

Charitable and community support

Last year, we established a charity forum made up of volunteer employees from across the Group, the aim of which is to ensure we are more involved in supporting our local communities through charitable work. Over the course of the year, Filtronic employees have participated in and sponsored various events. The Group provides paid leave of one day per annum for staff who wish to undertake voluntary or charitable work.

Supply chain

The adoption of an advanced product life cycle management software system has allowed for Group-wide management and control of our documentation to include product design, suppliers and change management as well as a module to address specific quality processes. Supply chain management is working to develop partnerships with our main suppliers to ensure they have systems in place that focus on quality, environment, corporate social responsibility and health and safety. The Group has adopted a specific policy on conflict minerals and works with our suppliers to ensure implementation including reporting on the use of conflict minerals throughout our supply chain.

The implementation of these management systems, which are designed to monitor and control processes such as quality, the environment and health and safety, provide Filtronic with the confidence that each and every product that is delivered to our customers is at an appropriate level of quality, and has been designed and manufactured in a way that considers our impact on the environment and the ultimate health and safety of our employees and our broader stakeholders who contribute to our success. We are continuing with the roll-out of a customer relationship management system in Filtronic that complements this approach.

Our Sedgefield site has embarked on a process for obtaining SC21 accreditation. SC21 (Supply Chains for the 21st Century) is an improvement programme designed to accelerate the competitiveness of the defence and aerospace industry by raising the performance of its supply chains.

The FY2019 Strategic report, has been reviewed and approved by the Board of Directors on 14 November 2019 and signed on its behalf by

Reg Gott
Chairman
14 November 2019

Governance report

Board of Directors

Executive Directors

Reginald (Reg) Gott (aged 62) has been a Non-Executive Director since 2006. He was appointed as Chairman of the Board at the AGM held in 2015 and became Executive Chairman on 1 November 2019. He was Chief Executive of Resource Group Limited until early 2016. From 2002 to 2008, he was an Executive Director of FKI plc, an international diversified engineering group, and from 2009 to 2012 he was Chief Executive of Nuaire Group. He has an extensive background in the machinery, automation and controls segments of the capital goods markets across Europe and North America.

Michael Tyerman (aged 41) was appointed as Finance Director with effect from 1 April 2016. Prior to joining Filtronic, Michael held various positions within Procter and Gamble, Huntsman Polyurethanes and Komatsu. He joined Filtronic in 2007 as Financial Controller of Filtronic Broadband and was promoted to the position of Group Financial Controller in 2009. He was Interim Head of Finance for the Filtronic Group from June 2015 and served in this position until his appointment to the Board. Michael is a Chartered Management Accountant.

Non-Executive Directors

Michael Roller (aged 54) was appointed as a Non-Executive Director on 1 June 2013; and was appointed Chairman of the Audit Committee on 27 November 2015. From March 2014 to May 2019, Michael was a member of the board of Bioquell plc as Group Finance Director. Michael has previously been Finance Director of a number of quoted companies, such as Corin Group plc. He has also held a number of other senior finance roles in a broad range of listed and private companies. Michael qualified as a Chartered Accountant with KPMG.

Peter (Pete) Magowan (aged 52) was appointed as a Non-Executive Director on 19 November 2018 and as Chairman of the Remuneration Committee in March 2019. He was previously an early employee and main board member of ARM Holdings, an Executive at Fidelity International Ltd and General Partner at Alta Berkeley Venture Partners. Pete´s early operational career was in sales and marketing at leading technology companies. He received a Bachelor of Science degree in Electrical and Electronic Engineering from the University of Manchester Institute of Science and Technology and a Diploma in Marketing from the University of Bristol Business School.

Photographs of directors by Simon Hill

Strategic report

Governance report continued

Introductory letter from the Chairman of the Board on the Governance report

The Board recognises the importance of good corporate governance to promote the long-term success and sustainability of the business for the benefit of our shareholders and wider stakeholders. As chair, it is my role to oversee the adoption, delivery and communication of the Company's corporate governance model.

In 2018, the Company adopted the Quoted Companies Alliance Code 2018 ("the QCA Code") and it is the principles of this code that has been applied for the financial year ending 31 May 2019. We have continued to consider and reflect on the principles of the QCA Code and their application throughout the year as the business has evolved.

The Board notes the emphasis the code places on promoting a corporate culture based on ethical values and behaviours. Whilst the Company is going through a period of challenge and change, the Board is committed to maintaining high standards of corporate governance, integrity and business ethics throughout the Group. To further the promotion of ethical values and behaviours, an exercise to help define and codify Filtronic's values has been initiated. It is the intention of management to encourage the participation of all staff in this exercise. We will be reporting on the outcomes of this exercise in next year's report.

We keep our governance arrangements under constant review. As an outcome of last year's Board evaluation exercise, we were pleased to welcome Pete Magowan to the Board as a Non-Executive Director in November. Pete's appointment has strengthened our sales and marketing expertise, which will be valuable in helping us steer the Company in line with our intentions for growth. I hope you find this report helpful in understanding our ongoing commitment to good governance.

Reg Gott
Chairman

Long-term value and strategy

The Company's business model is focussed on promoting long-term value for all stakeholders. It is explained in detail in the Objective and Strategy section of this annual report.

Shareholder engagement

The Board places great value on maintaining open relationships with shareholders and the primary point of contact in the Company for this function is the Executive Chairman, supported by the FD. The Executive Chairman and FD undertake an extensive programme of meetings with shareholders at least twice a year, following the announcement of the financial results. The senior independent director is also available as an alternative communication channel for shareholders who may wish to raise any concerns. Presentations are also made to analysts at those times to present the Group's results. This assists with the promotion of knowledge of the Group in the investment marketplace and with shareholders and also helps the directors to understand the needs and expectations of shareholders. The Board believes that the Annual General Meeting provides an excellent opportunity to communicate directly with shareholders. Please refer to the corporate governance section of our website for more details: www.filtronic.com/investors/.

Stakeholders

The Board is aware of its duties to the Company's stakeholders under section 172 of the Companies Act 2006 and considers its wider stakeholder and social responsibilities and their implications for long term success. Please refer to the Corporate social responsibility section of this report for an explanation of how the business model currently identifies the key resources on which it relies. The Company aims to improve the mechanism for obtaining direct feedback from stakeholders, (i) in the case of employees, through the roll-out of a new HR system that encourages feedback both anonymously and on the record across a broad range of issues and (ii) in the case of all other stakeholders through encouraging wider use of the messaging section of our new website www.filtronic.com/contact/.

Risk management

For full details on how the risk management framework is embedded and how the Board ensures that the Company's risk management system identifies and manages the relevant risks, please see the Risk Management section of this report.

Maintaining a well-functioning, balanced team led by the Chair including a governance framework that is fit for purpose

The Board is comprised of the Chairman (Reg Gott), Executive Director, Michael Tyerman, FD and two Non-Executive Directors (Pete Magowan and Michael Roller). Michael Roller is the senior independent Non-Executive Director and he together with Pete Magowan are regarded by the Board as being independent Non-Executive Directors. The Board is supported and assisted by the Company Secretary, Maura Moynihan, who attends, contributes to and minutes each Board meeting. All members of the Board have access to the advice and services of the General Counsel and Company Secretary and are able to take independent professional advice at the Company's expense in the discharge of their duties. The Company has procedures to deal with directors' conflicts of interest and the Board is satisfied that these procedures operate effectively. There is a formal schedule of matters reserved for the Board which is summarised below.

Board meetings

The Board meets regularly against a defined reporting timetable and also at times in between the scheduled meetings when required. As far as is reasonably practical, the Board meetings are held at the Company's operational sites to enable local management teams to present operational and strategic programme progress to the Board. The Board believes this arrangement fosters greater transparency and enhanced relationships between the management and the Board. During the year, the Board held meetings at its Sedgefield and Leeds sites.

Remit of the Board

Whilst many day-to-day operational matters are managed by the Executive Directors, other matters, including those listed below, are reserved for the Board:

- Strategy and oversight of the management of the Company;
- Approval of the Company and consolidated financial statements;
- Approval of major corporate transactions and commitments;
- Succession planning (appointment/removal of directors, PDMRs and the Company Secretary);
- Approval of all terms of reference for the committees of the Board;
- Review of the Group's overall corporate governance arrangements including systems of internal control and risk management; and
- Approval of the delegation of authority to the Chief Executive Officer or where appropriate to the relevant Board committee.

Committees

The Board continues to operate with three committees: The Audit Committee, the Remuneration Committee and the Nominations Committee. Detailed written terms of reference for each committee are maintained and are available to view on the Company website. In addition to formal meetings, the Nominations Committee and Remunerations Committee meet informally during the year to review and discuss Board composition and compensation.

Audit Committee

The primary function of the Audit Committee is to assist the Board in fulfilling its financial and risk oversight responsibilities.

The committee reviews items such as the half and full-year results and then make a recommendation to the Board. The Audit Committee is chaired by Michael Roller and includes Reg Gott and Pete Magowan.

Nominations Committee

The Nominations Committee is chaired by Reg Gott and includes Michael Roller and Pete Magowan. The Nominations Committee's duties are confined to the nomination of appointments, reappointments and termination of employment or engagement of directors and the Company Secretary.

Remuneration Committee

The Remuneration Committee is chaired by Pete Magowan and includes Michael Roller and Reg Gott. The members of the Remuneration Committee have no personal interest in the matters considered other than as shareholders. No potential conflicts of interest exist in relation to any member of the committee and their duties. The Remuneration Committee's responsibilities include ensuring that the remuneration policy of the Company and its implementation are appropriate. It ensures that levels of remuneration are sufficient to attract, retain and motivate directors, senior managers and executives of the quality required to run the Company successfully whilst avoiding paying more than is necessary for this purpose.

Directors' attendance FY2019

The Board normally schedules at least 10 meetings during the year.

Attendance at Board meetings and Committee meetings during the year ended 31 May 2019

	Board	Audit	Remuneration	Nominations
Total Meeting in FY2019	11	3	1	3
Reg Gott	11	3	1	3
Michael Roller	11	3	1	3
Pete Magowan*	7/7	1/1	N/A	N/A
Rob Smith	11	N/A	N/A	N/A
Michael Tyerman	11	N/A	N/A	N/A

**Pete Magowan joined the Board in November 2018*

Governance report continued

Board Composition, Skills, Time Commitment, Performance and Performance Evaluation

At present, the Board considers its overall size and the current composition to be broadly suitable and have the appropriate balance of sector, financial and public markets skills and experience. Composition of the Board will be reviewed at least annually by the Nominations Committee and will make recommendations to the Board based on a number of factors including the skills necessary for achieving the Company's strategy and diversity.

The Board receives regular updates from the Company's nominated adviser as well as from the Company's lawyers from time to time. All members of the Board have access to the advice and support of the Company Secretary who is also responsible for facilitating an induction program for new directors.

All directors are expected to devote such time as is necessary for the proper performance of their duties. This includes the need to make themselves available if an event occurs that requires Board involvement. It is expected that Non-Executive Directors who chair committees and/or who are the senior Non-Executive Director will increase their time commitment to the Company.

A formal Board evaluation process is carried out once every calendar year. The evaluation questions the performance of the directors individually both in their capacity as board member and for their specific role as well as the performance of the Board itself and each of the Committees. The 2018 evaluation exercise highlighted the requirement for a Board member with marketing and sales expertise in the sector; and consequently, it was followed by the appointment of Pete Magowan to the Board in November 2018. The 2019 Board evaluation will take place towards the end of the calendar year.

Company Culture

Acting with integrity and behaving responsibly is central to the execution of our strategy and underpin our business model. The Company has in place a comprehensive suite of Group policies that are endorsed by the Board and communicated to all employees, initially as part of a new employee's induction process and subsequently as each new policy is adopted. These policies are available to view and download on the Company's website at: www.filtronic.com. The policies are infused with the core values of Filtronic: Integrity, respect for others, seeking to always deliver quality products (and services) that meet and exceed customer expectations. Additionally, the Company has adopted a Procedures and Authorisations Manual ("PAM") (updated when required) which sets out among other matters the approved authority levels within the Filtronic Group.

To reinforce the values and cultures of Filtronic, training on the Group policies and PAM is periodically provided at all sites where each employee is reminded of the essence of each policy and its objective. During the most recent training sessions, employees were reminded of the existence of the whistleblowing policy so that employees who have concerns about ethical issues or matters of integrity can raise their concerns in confidence directly to Board members.

To emphasise to all employees the central role that the policies play in the day to day management and operation of the business, employee handbooks were amended and updated during the year across the Group to highlight the key role the policies play in the culture of the Company, the Group and its business enterprises.

An exercise to define the core values of Filtronic which should help to support the vision and objectives of the Company has been initiated. The participation of all employees will be encouraged with an emphasis on open and honest feedback. To help promote and monitor a healthy corporate environment, the Company will be rolling out a new HR system with features which will allow employee feedback both positive or negative on matters such as culture and values and which should allow employees to identify both positive and negative behaviours which exemplify (or not) such values.

Communication

The Company is committed to open communication with all its shareholders. Communication is driven primarily through the Company's website and the Annual General Meeting. All shareholders will receive a copy of the annual report (hard copy or electronic depending on shareholder preference. The half-year results are published on the Company's website. The Company reports on the activities and responsibilities of the audit committee and the remuneration committee each year in the annual report. Copies of historic annual reports and notices of general meetings for the last five years are available on the website.

Audit Committee report

During the year the Audit Committee comprised three independent Non-Executive Directors:

Michael Roller (Chairman), Reg Gott and Pete Magowan.

The Audit Committee's terms of reference include the following roles and responsibilities:

- Monitoring and making recommendations to the Board in relation to the Company's published financial statements and other formal announcements relating to the Company's financial performance;
- Advising the Board on whether the Committee believes the Annual Report and Accounts, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the Company's performance, business model and strategy;
- Monitoring and making recommendations to the Board in relation to the Company's internal financial controls and financial risk management systems;
- Annually considering the need for an internal audit function;
- Making recommendations to the Board in relation to the appointment, re-appointment and removal of the external auditor and approving the remuneration and terms of engagement of the external auditor;
- Reviewing and monitoring the external auditor's independence and objectivity and the effectiveness of the audit process, taking into consideration the relevant UK professional and regulatory requirements;
- Monitoring the extent to which the external auditor is engaged to supply non-audit services; and
- Ensuring that the Company has arrangements in place for the investigation and follow-up of any concerns raised confidentially by staff in relation to the propriety of financial reporting or other matters.

The Committee reviews its terms of reference and its effectiveness annually and recommends to the Board any changes required as a result of the review. The terms of reference are available on request from the Company Secretary and are available on the Company website, www.filtronic.com. The Audit Committee meets at least three times a year and has direct access to PricewaterhouseCoopers LLP ("PwC"), the Company's external auditor. The Board considers that the members of the Committee are independent and collectively have the skills and experience required to discharge their duties effectively, and that the Chairman of the Committee has recent and relevant financial experience.

The Company outsources its internal audit activity to third parties as it is not deemed appropriate given the size of the Company to have its own internal audit function. However, the Committee considers annually whether there is a need for an in-house internal audit function to be established and, were it to conclude that this would be more appropriate than the current arrangements, would recommend this to the Board.

During the year ended 31 May 2019, the Audit Committee discharged its responsibilities by:

- Reviewing and approving the external auditor's terms of engagement, remuneration and independence;
- Reviewing the external auditor's plan for the audit of the Company's financial statements, including the identification of key risks;
- Reviewing the Company's internal financial controls operated in relation to the business and assessing the effectiveness of those controls in minimising the impact of key risks;
- Reviewing the appropriateness of the Company's accounting policies;
- Reviewing the Company's draft Annual Report and Accounts, Interim Report and interim management statements prior to Board approval;
- Reviewing the external auditor's detailed report to the Committee on the annual financial statements; and
- Reviewing the need for an internal audit function, and determining what aspects of the Company's operations should be subject to outsourced internal audit scrutiny.

The following key areas of risk and judgement have been identified and considered by the Audit Committee in relation to the business activities and financial statements of the Group and Parent Company:

- Group - Discontinued operations
- Group - Warranty; and
- Parent Company – Carrying value of the investment in the subsidiary.

These issues were discussed with management and the auditor, in particular at the pre-year end audit planning meeting and at the conclusion of the audit of the financial statements.

Discontinued operations: Following a comprehensive strategic review the Board announced its intention to dispose of the Telecoms Antenna Operation. The Committee considered the requirements of IFRS 5 'Non-current assets held for sale and discontinued operations'. The standard provides specific criteria that are required to be met for an operation to be classified as held for sale, including:

- the sale must be highly probable;
- there must be a committed plan in place to sell; and
- completion is expected within one year.

Given a sales process had commenced at the balance sheet date, and the other conditions set out in IFRS 5 had been met, the Committee were satisfied that the Telecoms Antenna

Audit Committee report continued

Operation should be classified as 'held for sale'. The Committee was also in agreement it should be recognised at carrying value. The Committee further assessed whether this part of the business should be classified as a discontinued operation within the Income Statement. IFRS 5 states that where the operation has not been disposed of, but meets the definition as held for sale, then it should be classed as a discontinued operation, where the operation represents a separate major line of business. The Committee was satisfied that it should be treated as discontinued.

Warranty provision: The Group makes estimates of provisions for commitments arising from past events. IAS37 requires that the entity recognises a best estimate of the amounts needed to settle the obligation where an entity has an obligation as a result of a past event, an outflow of resources is likely to settle the obligation and the amount can be reliably estimated.

The Group became aware of a performance issue during the year on one of its legacy products relating to a component. To settle the obligation, negotiations took place with the customer to enter a warranty settlement agreement which capped the liability and settled the obligation. The Committee reviewed the warranty settlement agreement and concluded the provision and methodology applied was appropriate.

Carrying value of the investment in the subsidiary: The Committee considered the judgements made in relation to the valuation methodology adopted by management and the model inputs used. These are set out in note 16 to the financial statements.

The Committee agreed with the judgements made by management and concluded that no impairment of the carrying value of the investment in the subsidiary in the Parent Company accounts was necessary.

The Company's management and the auditor confirmed to the Audit Committee that they were not aware of any material misstatements. Having reviewed the reports received from management and the auditor, the Committee is satisfied that the key areas of risk and judgement have been appropriately addressed in the financial statements and that the significant assumptions used in determining the value of assets and liabilities have been properly appraised and are sufficiently robust. The Committee considers that PwC has carried out its duties as the auditor in a diligent and professional manner.

As part of the review of auditor independence, PwC has confirmed that it is independent of the Company and has complied with applicable auditing standards.

In assessing the auditor's effectiveness, the Committee:

- Challenged the work done by the auditor to test management's assumptions and estimates in the key risk areas;
- Reviewed reports received from the auditor on these and other matters;
- Received and considered feedback from management; and
- Held private meetings with the auditor that provided the opportunity for open dialogue and feedback between the Committee and the auditor without management being present.

In addition, the Chairman of the Committee has discussions by telephone and in person with the audit lead partner outside the formal committee process throughout the year.

Having completed its review, the Audit Committee is satisfied that PwC remained effective and independent in carrying out its responsibilities up to the date of signing this report.

After careful consideration of the advice of the Audit Committee, the Board has concluded that the 2019 Annual Report is fair, balanced and understandable and provides the necessary information for the Company's shareholders to assess the Group's risks, performance, business model and strategy.

Directors' remuneration report

Annual statement on remuneration

On behalf of the Board, I am pleased to present the Filtronic Directors' remuneration report for the year ended 31 May 2019.

The Company, being listed on AIM, is not required to produce a comprehensive Directors' remuneration report or to submit a remuneration policy to a binding vote. However, the Board does wish to maintain transparency and demonstrate good governance and so provides the following remuneration report.

The remuneration report sets out payments and awards made to the directors.

The Remuneration Committee comprises the Non-Executive Directors, including the Chairman. It defines the Company's policy on remuneration, benefits and terms of employment for Executive Directors and senior management. The Committee also reviews and approves general increases in staff salaries and bonus arrangements and takes these into account when setting remuneration packages for Executive Directors and senior management.

The Remuneration Committee has reviewed the remuneration packages of the Executive Directors and senior management to ensure these continue to attract, retain and motivate talented people, while recognising wider shareholder interest. The Committee reviews all incentive-based rewards before they are awarded and has full discretion to adjust awards downwards if deemed appropriate.

The Remuneration Committee terms of reference are available to view at www.filtronic.com/investors/.

The Remuneration Committee met once during the year including ad hoc meetings when needed.

Pete Magowan
Chairman, Remuneration Committee
14 November 2019

Details of the service contracts currently in place for directors are as follows:

Name	Executive service agreement appointment date	Key current terms	Notice period
Reg Gott	Appointed to the Board on 13 July 2006 Executive Chairman Nominations Committee Chairman	£180,000	6 months
Michael Tyerman Finance Director	Appointed to the Board on 1 April 2016	Base salary £102,455 Car allowance Annual bonus Health insurance Pension	6 months

Name	Role	Non-Executive terms of appointment date	Fee	Notice period
Michael Roller	Audit Committee Chairman	Appointed to the Board on 1 June 2013	£40,000	3 months
Pete Magowan	Remuneration Committee Chairman	Appointed to the Board on 19 November 2018	£40,000	3 months

Certain sections constitute the audited part of the reports of the remuneration report.

Directors' remuneration report continued

Total single figure of remuneration for directors—audited

The directors' total remuneration in respect of the year under review is shown below and compared to the previous year. The information in these tables has been audited by the Company's independent auditor.

£000	Salary or fee FY2019	Salary or fee FY2018	Bonus FY2019	Bonus FY2018	Benefits FY2019	Benefits FY2018	Long Term Incentive FY2019	Long Term Incentive FY2018	Total remuneration excluding pension contributions and share-based payments FY2019	Total remuneration excluding pension contributions and share-based payments FY2018
Executive Directors										
Rob Smith	**162**	157	-	-	**11**	11	**31**	-	**204**	168
Michael Tyerman	**92**	90	-	-	**8**	8	**16**	-	**116**	98
Non-Executive Directors										
Reg Gott	**60**	60	-	-	-	-	-	-	**60**	60
Michael Roller	**40**	40	-	-	-	-	-	-	**40**	40
Pete Magowan[1]	**20**	-	-	-	-	-	-	-	**20**	-
Total	**374**	347	-	-	**19**	19	**47**	-	**440**	366

[1]Pete Magowan was appointed to the Board on 19 November 2018.

Notes to the single figure table of remuneration for directors—audited

Taxable benefits

Taxable benefits in kind were unchanged in FY2019 and comprised car allowance and private health insurance.

In addition to these taxable benefits, the Executive Directors are provided with life assurance.

Incentive outcomes for FY2019

There was no bonus payment relating to FY2019.

Annual performance-related bonus plan

An annual performance-related bonus plan has been introduced for the year ending 31 May 2020 which will reward Executive Directors and key management and staff cash bonuses for delivering stretching profit targets aligned to the 2020 business plan.

Total single figure of pension benefits for directors—audited

The Executive Directors' total pension benefits in respect of the year under review are shown below and compared to the previous year. The information in these tables has been audited by the Company's independent auditor.

£000	Pension contributions FY2019	Pension contributions FY2018
Rob Smith	**13**	13
Michael Tyerman	**7**	7
Total	**20**	20

Contributions were made to the Company's defined contribution scheme.

Directors' and relevant senior management holdings of Filtronic shares—audited

Directors are not required but are expected to have holdings in the ordinary share capital of the Company. The information in the following tables has been audited by the Company's independent auditor.

The interests of the directors, who were serving as at 31 May 2019, in the Company's ordinary shares, which excludes interests under the share option schemes, are set out below:

	2019		2018	
	Shares	**%**	Shares	%
Rob Smith	**257,656**	**0.1%**	257,656	0.1%
Michael Tyerman	**11,882**	**0.0%**	11,882	0.0%
Reg Gott	**354,429**	**0.2%**	354,429	0.2%
Michael Roller	**101,762**	**0.0%**	101,762	0.0%
Pete Magowan	**750,000**	**0.4%**	-	-
	1,475,729	**0.7%**	725,729	0.3%

All of the above shareholdings are held beneficially and include holdings of directors' connected parties.

Management share option scheme—audited

The Executive Directors who served during the year ending 31 May 2019 held the following options over the ordinary shares of the Company:

	Plan	Exercise period	Option price	2019	2018
Rob Smith	ESOP	01/03/2019—28/02/2026	5.37p	**1,000,000**	1,000,000
Rob Smith	SAYE	01/06/2019—30/11/2019	5.20p	**165,565**	165,565
Michael Tyerman	ESOP	01/03/2019—28/02/2026	5.37p	**300,000**	300,000
Michael Tyerman	SAYE	01/06/2019—30/11/2019	5.20p	**275,478**	275,478
				1,741,043	1,741,043

The ESOP scheme introduced in May 2016 was opened to Executive Directors and key management and staff across the Group with the specific intent to retain staff by awarding share options for delivering a significant increase in the share price, which if sustained for a defined minimum period will trigger vesting, but which can only be exercised by directors after three years of the scheme opening. However, the Remuneration Committee is able to adjust the outcome at its discretion to ensure it is fair and appropriate, taking into account the overall performance of the Group. Information relating to share options can be found in note 32.

The closing middle market price on 31 May 2019 was 8p, and on 31 May 2018 it was 9p. The range of middle market share prices during the year ended 31 May 2019 was 5p—29p.

There were no changes in directors' interests between 31 May 2019 and 14 November 2019. The Company's register of directors' interests, which is open to inspection at the registered office, contains full details of directors' shareholdings.

Directors' report

The directors present their report together with the audited consolidated financial statements for the year ended 31 May 2019.

Going concern

The Group's business, and the factors likely to affect its future development, performance and position are set out in the Strategic report.

The revenue, trading results and cash flows are explained in the financial review on page 14.

After a review of forecasts including projections of profitability and cash flows for the year to 14 November 2020, the directors believe that the Group has adequate resources to continue to operate for the foreseeable future and that it is therefore appropriate to continue to adopt the going concern basis of accounting in the preparation of the consolidated and Company financial statements.

Directors and their interests

The directors of the Company during the year, and up to the date of this report, were as follows:

Rob Smith (Resigned 31 October 2019)
Michael Tyerman
Reg Gott
Michael Roller
Pete Magowan

Details of directors' interests in the share capital of the Company are set out in the remuneration report on page 29.

Reg Gott, having served on the Board for more than nine years, retires by rotation and, being eligible, offers himself for re-election at the Annual General Meeting.

Pete Magowan, having been appointed by the Board on 19 November, offers himself for election at the Annual General Meeting.

Michael Roller, retires by rotation, and being eligible, offers himself for re-election at the Annual General Meeting.

Michael Tyerman, retires by rotation, and being eligible, offers himself for re-election at the Annual General Meeting.

Directors' indemnity

The Company has in place directors' and officers' liability insurance on behalf of its directors and officers in accordance with the provisions of the Companies Act. In addition, certain directors benefit from an indemnity from the Company, to the extent not prohibited by law, in respect of losses incurred as a result of the discharge of their duties in the management or supervision of any Company in the Group. The indemnity does not automatically terminate when the indemnified person ceases to be a director.

Directors' conflicts of interest

There are no declarations to be made under Article 182 of the Companies Act 2006.

Research and development expenditure

Research and development costs in the year before capitalisation and amortisation relating to continuing operations were £1.2m (2018: £1.7m), of which £0.2m was capitalised (2018: £nil). Amortisation of development costs in the year was £0.0m (2018: £0.0m).

Substantial shareholdings

Up to 31 May 2019, the Company had been notified, in accordance with chapter 5 of the disclosure and transparency rules, of the following voting rights as shareholders of the Company. An analysis of shareholders as at 31 May 2019 (as disclosed by shareholders via TR1) is set out in the table below. As at 31 May 2019, the Company had issued share capital of 208,128,947 ordinary shares of 0.1p each.

Financial results and dividend

The results for the year are set out in the income statement on page 37. The position at the end of the year is shown in the balance sheet on page 39.

The directors are not recommending payment of a dividend (2018: £nil).

Share capital

The Company's share capital consists of 0.1p ordinary shares. The rights and obligations attached to each share are equal. Each share carries the right to one vote at the Annual General Meeting of the Company and carries no right to fixed income. There are no limitations on holding or transfer of the shares. The Board has no powers to issue or buy back the Company's shares, other than those approved by the shareholders at the Annual General Meeting held in October 2018.

Top Investors

Rank	Investor	31-May-19	%
1	Legal & General Investment Mgt	30,994,078	14.89
2	Mrs Diana M Dixon	29,000,000	13.93
3	Canaccord Genuity Wealth Management	18,951,200	9.11
4	Mr David Newlands and Mrs Monique Newlands	12,670,000	6.09
5	River & Mercantile Asset Mgt	11,333,451	5.45

Political and charitable contributions
No contributions were made for political purposes (2018: £nil). The Group made charitable donations of £1,004 in the year (2018: £1,244).

Equal opportunities
The directors are committed to ensuring that there are equal opportunities throughout the Group for all employees with no discrimination on account of race, gender, age, sexual orientation, disability, political views or religious beliefs.

Employee communication
Employee engagement with our strategy and values is vital to the success of the Group. The directors place great importance on keeping employees informed on matters that affect them as employees as well as matters that affect the performance of the Group. This is achieved through formal and informal meetings as well as through Group communication sessions.

Annual General Meeting
The Annual General Meeting of the Company will be held on 27 November 2019 at 11am at the offices of Pinsent Masons LLP, 1 Park Row, Leeds LS1 5AB. Full details of the business to be transacted at the meeting will be set out in the notice of the Annual General Meeting.

Statement of directors' responsibilities in respect of the Annual Report, the Directors' report and the financial statements
The directors are responsible for preparing the Annual Report and the Group and Parent Company financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare Group and Parent Company financial statements for each financial year. As required by the AIM rules of the London Stock Exchange, they are required to prepare the Group financial statements in accordance with International Financial Reporting Standards as adopted by the EU ("IFRSs as adopted by the EU") and applicable law and have elected to prepare the Parent Company financial statements on the same basis.

Under company law, the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of their profit or loss for that period. In preparing each of the Group and Parent Company financial statements, the directors are required to:

- Select suitable accounting policies and then apply them consistently;
- Make judgements and estimates that are reasonable, relevant and reliable;
- State whether they have been prepared in accordance with IFRSs as adopted by the EU;
- Assess the Group and Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- Use the going concern basis of accounting unless they either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the Parent Company and enable them to ensure that its financial statements comply with the Companies Act 2006. They are responsible for such internal control, as they determine, as is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error and have general responsibility for taking such steps as are reasonably open to them, to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group and Company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and Company and enable them to ensure that the financial statements comply with the Companies Act 2006.

The directors are responsible for the maintenance and integrity of the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Under applicable law and regulations, the directors are also responsible for preparing a Strategic report and a Directors' report that complies with that law and those regulations.

Disclosure of information to the auditor
The directors who held office at the date of approval of this Directors' report confirm that:

- So far as they are each aware, there is no relevant audit information of which the Company's auditor is unaware; and
- Each director has taken all the steps that they ought to have taken as a director to make themselves aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

Auditor
PricewaterhouseCoopers LLP has expressed a willingness to continue in office as the auditor and a resolution to reappoint PricewaterhouseCoopers LLP will be proposed at the forthcoming Annual General Meeting.

On behalf of the Board
Maura Moynihan
Company Secretary
14 November 2019

Independent auditors' report to the members of Filtronic plc

Opinion

In our opinion, Filtronic plc's Group financial statements and Company financial statements (the "financial statements"):

- give a true and fair view of the state of the Group's and of the Company's affairs as at 31 May 2019 and of the Group's loss and the Group's and the Company's cash flows for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and, as regards the Company's financial statements, as applied in accordance with the provisions of the Companies Act 2006; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual Report and Accounts 2019 (the "Annual Report"), which comprise: the consolidated and Company balance sheets as at 31 May 2019; the consolidated income statement and consolidated statement of comprehensive income, the consolidated and Company cash flow statements, and the consolidated and Company statements of changes in equity for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Our audit approach

Overview

Materiality

- Overall Group materiality: £205,000 (2018: £250,000), based on 1% of revenue.
- Overall Company materiality: £122,000 (2018: £149,000), based on 1% of total assets.

Audit Scope

- Three full scope audit components have been identified alongside the Company. This approach provided 94% coverage over the Group's revenue.
- All full scope audits were performed by the Group engagement team.
- Analytical review procedures were performed by the Group engagement team over all out of scope components.

Key audit matters

- Discontinued operations (Group)
- Warranty provision (Group)
- Carrying value of investments (Company)

The Scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the directors that represented a risk of material misstatement due to fraud.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, 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. This is not a complete list of all risks identified by our audit.

Key audit matter	How our audit addressed the key audit matter
Discontinued operations (Group)	
We focused on this area due to the detailed requirements of IFRS in determining the appropriate classification of business performance and balance sheet items between continuing and discontinuing operations. The Group is currently going through the process of re-aligning its strategic focus to its critical communications and telecommunications operations, and thus plans to dispose of its antenna capabilities. See note 5. IFRS 5 sets out specific criteria which must be met for a business operation to be classified as a 'disposal group' held for sale. There is a risk that management's plan for disposal does not meet the requirements of IFRS 5, or the assets and liabilities associated with the disposal group cannot be reliably estimated.	We obtained an understanding of the planned disposal and the timelines in which management expect to complete the sale, considering the status of the disposal work streams. We reviewed correspondence with bidders, including indicative offers and documentation supporting the commercial rationale of the transaction. We substantively tested management's carve out process, developing an independent expectation of the carrying value of the assets and liabilities related to the proposed disposal group and of the after tax result from discontinued operations to be presented in the consolidated income statement. Based on the procedures we performed we were able to obtain sufficient audit evidence in respect of the appropriate application of IFRS 5 in the Annual Report.
Warranty provision (Group)	
We focused on this area due to a specific, material warranty charge recognised in the year. See note 24. The Group has recognised a specific warranty provision of $2m (£1.6m) as a result of performance issues of antenna product seen in the field that were shipped in 2016/17. IAS 37 states that the amount to be recognised as a provision should be the best estimate of the expenditure required to settle the present obligation at the balance sheet date. Due to the judgemental nature of warranty provisioning there is considerable estimation uncertainty associated with the amount recorded.	We obtained correspondence with the counterparty to assess the level of provisioning against latest expectations of final settlement and, subsequently, obtained the signed settlement agreement confirming the matter has been settled at the level indicated in the previous correspondence between the parties. We considered the completeness of the provision by reference to any other known or expected performance issues with the same or similar product in the field. Based on the procedures we performed we were able to obtain sufficient audit evidence in respect of the adequacy of the warranty provision.
Carrying value of investments (Company)	
We focused on this area due to the material investment value held on the Company's balance sheet and the estimates and judgements required to determine its value in use and fair value less costs to sell.	We considered the carrying value of the investment by reference to the 'value in use' model prepared by management, which was based on discounted cash flows of the continuing Filtronic plc Group. We tested the inputs to the model to Board approved budgets, including growth rates and capital expenditure forecasts and considered the discount rate applied by reference to the Group's weighted average cost of capital.

Independent auditors' report to the members of Filtronic plc continued

Key audit matter	How our audit addressed the key audit matter
Carrying value of investments (Company) continued	We determined that the calculations were most sensitive to growth and discount rate assumptions and calculated the degree to which these assumptions would need to move before an impairment conclusion was reached. We discussed the likelihood of such movements with management and agreed with their conclusion that they were unlikely. We also considered the carrying value against firm offers received for the Group's antennas capability, as this is a key input to the 'fair value less costs to sell' valuation of the discontinued operation. Based on the procedures we performed we were able to obtain sufficient audit evidence in respect of the carrying value of the investment balance.

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the Group and the Company, the accounting processes and controls, and the industry in which they operate.

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the Group and the parent Company, the accounting processes and controls, and the industry in which they operate.

There are three components which required a full scope audit of their financial information, due to their size and contribution to the financial results of the Group. These were the trading entities within the UK, being Filtronic Broadband Limited and Filtronic Wireless Limited, in addition to the trading entity in the US, Filtronic Wireless Inc.

Filtronic plc is also subject to a full scope audit of its financial information, due to the separate presentation of these financial statements within this report. All audit work supporting the Group opinion was performed by the PwC UK engagement team, with the exception of testing of physical inventory quantities, which was performed by PwC teams in local territories.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	Company financial statements
Overall materiality	£205,000 (2018: £250,000).	£122,000 (2018: £149,000).
How we determined it	1% of revenue.	1% of total assets.
Rationale for benchmark applied	Based upon the Company's trading performance in the year, revenue is considered to be the most stable and appropriate benchmark in appraising financial performance, and is a generally accepted auditing benchmark.	We believe that as a holding company, the most appropriate benchmark for materiality is total assets, which is a generally accepted auditing benchmark.

For each component in the scope of our group audit, we allocated a materiality that is less than our overall group materiality. The range of materiality allocated across components was between £160,000 and £175,000. Certain components were audited to a local statutory audit materiality that was also less than our overall group materiality.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above £10,250 (Group audit) (2018: £12,500) and £6,000 (Company audit) (2018: £12,500) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Conclusions relating to going concern

ISAs (UK) require us to report to you when:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Group's and Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

We have nothing to report in respect of the above matters.

However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's and Company's ability to continue as a going concern. For example, the terms on which the United Kingdom may withdraw from the European Union are not clear, and it is difficult to evaluate all of the potential implications on the Group's trade, customers, suppliers and the wider economy.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic Report and Directors' Report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, ISAs (UK) require us also to report certain opinions and matters as described below.

Strategic Report and Directors' Report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Directors' Report for the year ended 31 May 2019 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the Group and Company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic Report and Directors' Report.

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Statement of Directors' Responsibilities, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. 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.

Independent auditors' report to the members of Filtronic plc continued

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2006 exception reporting

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Company, or returns adequate for our audit have not been received from branches not visited by us; or
- certain disclosures of directors' remuneration specified by law are not made; or
- the Company financial statements are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Tom Yeates (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
Newcastle upon Tyne
14 November 2019

Consolidated income statement

for the year ended 31 May 2019

Continuing operations	Note	Group 2019 £000	Restated 2018 £000
Revenue		**15,932**	21,632
Earnings before interest, taxation, depreciation and amortisation		**664**	3,644
Amortisation of other intangible assets	17	**(38)**	(45)
Amortisation of development costs	17	**(37)**	(33)
Depreciation	18	**(355)**	(367)
Operating profit		**234**	3,199
Finance costs		**(154)**	(61)
Exceptional finance items	6	**-**	(486)
Finance costs	12	**(154)**	(547)
Finance income	13	**55**	-
Profit before taxation		**135**	2,652
Taxation	14	**2,099**	62
Profit for the period from continuing operations		**2,234**	2,714
Loss for the period from discontinuing operations	5	**(3,547)**	(1,483)
(Loss)/profit for the period		**(1,313)**	1,231
Basic (loss)/earnings per share	15	**(0.63)p**	0.59p
Diluted (loss)/earnings per share	15	**(0.63)p**	0.59p

The (loss)/profit for the period is attributable to the equity shareholders of the Parent Company, Filtronic plc.

Financials

Consolidated statement of comprehensive income

for the year ended 31 May 2019

	Note	Group 2019 £000	2018 £000
(Loss)/profit for the period		**(1,313)**	1,231
Other comprehensive income			
Items that are or may be subsequently reclassified to profit and loss:			
Currency translation movement arising on consolidation	29	**60**	178
Total comprehensive income for the period		**(1,253)**	1,409

The total comprehensive (expense)/income for the period is attributable to the equity shareholders of the Parent Company, Filtronic plc.

For the Company, there were no items of comprehensive (expense)/income other than the loss for the year. Accordingly, no Company statement of comprehensive income has been presented.

Consolidated balance sheet

at 31 May 2019

	Note	Group 2019 £000	Group 2018 £000
Non-current assets			
Goodwill and other intangibles	17	**1,247**	3,904
Property, plant and equipment	18	**1,030**	1,411
Deferred tax	19	**1,982**	965
		4,259	6,280
Current assets			
Inventories	20	**2,081**	2,138
Trade and other receivables	21	**4,220**	6,388
Cash and cash equivalents		**2,625**	3,794
Assets held for sale	22	**5,046**	-
		13,972	12,320
Total assets		**18,231**	18,600
Current liabilities			
Trade and other payables	23	**2,316**	5,076
Provisions	24	**2,265**	485
Deferred income	25	**81**	360
Financial liabilities	26	**231**	206
Liabilities directly associated with the assets held for sale	22	**2,207**	-
		7,100	6,127
Non-current liabilities			
Financial liabilities	26	**118**	312
		118	312
Total liabilities		**7,218**	6,439
Net assets		**11,013**	12,161
Equity			
Share capital	27	**10,789**	10,788
Share premium	28	**10,715**	10,640
Translation reserve	29	**(558)**	(618)
Retained earnings	31	**(9,933)**	(8,649)
Total equity		**11,013**	12,161

The total equity is attributable to the equity shareholders of the Parent Company, Filtronic plc.

Company number 2891064.

Approved by the Board on 14 November 2019 and signed on its behalf by

Reg Gott
Chairman
14 November 2019

Financials

Consolidated statement of changes in equity

for the year ended 31 May 2019

	Share capital £000	Share premium £000	Translation reserve £000	Retained earnings £000	Total equity £000
Balance at 1 June 2017	10,788	10,640	(796)	(9,905)	10,727
Profit for the year	-	-	-	1,231	1,231
Share-based payments	-	-	-	25	25
Currency translation movement arising on consolidation	-	-	178	-	178
Balance at 31 May 2018	10,788	10,640	(618)	(8,649)	12,161
Loss for the year	-	-	-	(1,313)	(1,313)
New shares issued	1	75	-	-	76
Share-based payments	-	-	-	29	29
Currency translation movement arising on consolidation	-	-	60	-	60
Balance at 31 May 2019	10,789	10,715	(558)	(9,933)	11,013

Company statement of changes in equity

for the year ended 31 May 2019

	Share capital £000	Share premium £000	Retained earnings £000	Total equity £000
Balance at 1 June 2017	10,788	10,640	(3,555)	17,873
Loss for the year	-	-	(695)	(695)
Share-based payments	-	-	5	5
Balance at 31 May 2018	10,788	10,640	(4,245)	17,183
Loss for the year	-	-	(819)	(819)
New shares issued	1	75	-	76
Share-based payments	-	-	63	63
Balance at 31 May 2019	10,789	10,715	(5,001)	16,503

Consolidated cash flow statement

for the year ended 31 May 2019

	Group	
	2019 £000	2018 £000
Cash flows from operating activities		
Profit for the period from continuing operations	**2,234**	2,714
Loss for the period from discontinuing operations	**(3,547)**	(1,483)
Taxation	**(2,059)**	(5)
Finance income	**(55)**	-
Finance costs	**154**	547
Operating (loss)/profit including discontinuing operations	**(3,273)**	1,773
Share-based payments	**29**	25
Profit on disposal of plant and equipment	**(2)**	(48)
Depreciation	**459**	542
Amortisation of intangible assets	**217**	141
Impairment of intangible assets	**512**	-
Movement in inventories	**(348)**	111
Movement in trade and other receivables	**1,669**	2,259
Movement in trade and other payables	**(657)**	(3,292)
Movements in provisions	**1,780**	(60)
Change in deferred income	**(279)**	244
Tax (paid)/received	**(127)**	56
Net cash (used in)/generated from operating activities	**(20)**	1,751
Cash flows from investing activities		
Capitalisation of development costs	**(666)**	(436)
Acquisition of intangible assets	**(11)**	(19)
Acquisition of plant and equipment	**(380)**	(604)
Proceeds on sale of assets	**59**	49
Net cash used in investing activities	**(998)**	(1,010)
Cash flows from financing activities		
Interest paid	**(103)**	(61)
Proceeds from bank loans	**-**	300
Exercise of employee share options	**76**	-
Proceeds from hire purchase agreements	**-**	301
Repayment of interest-bearing borrowings	**(182)**	(75)
Net cash (used in)/generated from financing activities	**(209)**	465
Movement in cash and cash equivalents	**(1,227)**	1,206
Currency exchange movement	**58**	(10)
Opening cash and cash equivalents	**3,794**	2,598
Closing cash and cash equivalents	**2,625**	3,794

Company balance sheet

at 31 May 2019

	Note	Company 2019 £000	Company 2018 £000
Non-current assets			
Investments in subsidiaries	16	**10,564**	10,564
Intangible assets	17	**19**	122
		10,583	10,686
Current assets			
Trade and other receivables	21	**6,148**	11,528
Cash and cash equivalents		**196**	342
		6,344	11,870
Total assets		**16,927**	22,556
Current liabilities			
Trade and other payables	23	**424**	5,373
Total liabilities		**424**	5,373
Net assets		**16,503**	17,183
Equity			
Share capital	27	**10,789**	10,788
Share premium	28	**10,715**	10,640
Share based payments	33	**63**	5
Loss for the period		**(819)**	(695)
Retained earnings	31	**(4,245)**	(3,555)
Total equity		**16,503**	17,183

Company number 2891064.

Approved by the Board on 14 November 2019 and signed on its behalf by

Reg Gott
Chairman
14 November 2019

Company cash flow statement

for the year ended 31 May 2019

	Company	
	2019 £000	2018 £000
Cash flows from operating activities		
Loss for the period	**(819)**	(695)
Finance costs	**38**	34
Operating loss	**(781)**	(661)
Amortisation of intangibles	**30**	26
Share-based payments	**63**	5
Movement in trade and other receivables	**5,380**	944
Movement in trade and other payables	**(4,949)**	(58)
Net cash (used in)/generated from operating activities	**(257)**	256
Cash flows from investing activities		
Acquisition of intangible assets	**(2)**	(5)
Sale on proceeds of assets	**75**	-
Net cash generated from/(used in) investing activities	**73**	(5)
Cash flows from financing activities		
Proceeds from exercise of share options	**76**	-
Interest paid	**(38)**	(33)
Net cash generated from/(used in) financing activities	**38**	(33)
Movement in cash and cash equivalents	**(146)**	218
Opening cash and cash equivalents	**342**	124
Closing cash and cash equivalents	**196**	342

Notes to the financial statements

for the year ended 31 May 2019

1 Accounting policies

Reporting entity

Filtronic plc is a Company registered in England and Wales, domiciled in the United Kingdom, and listed on AIM on the London Stock Exchange.

Basis of preparation

The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and the Companies Act 2006 as applicable to companies using IFRS.

In accordance with corporate governance requirements and the statement of directors' responsibilities, and as disclosed in the Directors' report, the directors have undertaken a review of forecasts and the Group's cash requirements for at least the next twelve months from the balance sheet signing date in order to consider whether it is appropriate that the Group continues to adopt the going concern assumption.

The accounts have been prepared on a going concern basis.

The financial statements have been prepared under the historical cost convention except for forward foreign exchange contracts that are accounted for on a fair value basis.

The accounting policies have been applied consistently throughout the Group.

Basis of consolidation and foreign currency translation

The financial statements consolidate the income statements, balance sheets and cash flow statements of the Company and all of its subsidiaries.

Subsidiaries are all entities over which the Group has the power to govern the financial and operating policies. Subsidiaries are consolidated from the date on which control is transferred to the Group, and are not consolidated from the date that control ceases. Intragroup transactions and balances are eliminated on consolidation.

In publishing the Parent Company financial statements here together with the Group financial statements, the Company has taken advantage of the exemptions in s408 of the Companies Act 2006 not to present its individual income statement and related notes that form part of these approved financial statements. On consolidation, the financial statements of subsidiaries with a functional currency other than sterling are translated into sterling as follows:

- The assets and liabilities in their balance sheets plus any goodwill are translated at the rate of exchange ruling at the balance sheet date; and
- The income statements and cash flow statements are translated at the average rate of exchange each month in the period, which approximates the rate of exchange ruling at the date of the transactions.

Currency translation movements arising on the translation of the net investments in foreign subsidiaries are recognised in the translation reserve, which is a separate component of equity.

The functional currency of each Group company is the currency of the primary economic environment in which the Group company operates. The financial statements are presented in sterling which is the functional and presentational currency of the Company.

Transactions denominated in foreign currencies are translated into the functional currency of each Group company at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency at the rate of exchange ruling at the balance sheet date.

Foreign exchange gains and losses arising on the settlement of such transactions and translation of monetary assets and liabilities are recognised in the income statement.

Discontinued operations

A discontinued operation is a component of the Group's business, of which the operation and cash flows can be clearly distinguished from the rest of the Group and which:

- represents a separate major line of business; and
- is part of a single co-ordinated plan to dispose of a separate major line of business.

Classification as a discontinued operation occurs at the earlier of disposal or when the operation meets the criteria to be classified as held-for-sale under IFRS 5.

When an operation is classified as a discontinued operation, the comparative income statement and OCI is re-presented as if the operation had been discontinued from the start of the comparative year.

1 Accounting policies (continued)

Revenue

In May 2014, the IASB issued IFRS 15 Revenue from Contracts with Customers. This standard applies to annual reporting periods beginning on or after 1 January 2018 and has been endorsed by the EU. This standard replaces IAS 18 Revenue. The Group has adopted IFRS 15 in these financial statements.

The scope of IFRS 15 includes all contracts where the Group has agreed to provide goods or services to a customer, except for the following:

- Insurance contracts (IFRS 4)
- Financial instruments (IAS 39/IFRS 9)
- Leases (IAS 17)

IFRS 15 establishes principles for determining when and how revenue arising from contracts with customers should be recognised. Filtronic should recognise revenue when it transfers goods or services to a customer based on the amount of consideration to which we expect to be entitled from a customer in exchange for fulfilling our performance obligations.

During the year, the Group has undertaken a review of all income streams against the requirements of IFRS 15. Management has undertaken an assessment of all contracts and revenue streams across the business using the five-step approach specified by IFRS 15: identify the contract(s) with the customer; identify the performance obligations in the contract; determine the transaction price; allocate the transaction price to the performance obligations in the contract; and recognise revenue when (or as) a performance obligation is satisfied.

In determining the appropriate method of recognising revenue, management is required to make judgements as to whether performance obligations are satisfied over a period of time or at a point in time. For performance obligations that are satisfied over a period of time, judgements are made as to whether the output method or the input method is more appropriate to measure progress towards complete satisfaction of the performance obligation. If performance obligations are not satisfied over time, the Group recognises revenue at a point in time.

No revenue was recognised against development milestones in the current or prior financial year.

Revenue is measured at the fair value of consideration received or receivable for goods and services provided or performed in the normal course of business net of value added tax or sales tax.

Sale of finished goods product

Sales of finished goods product to customers are recognised when control of the product has transferred to the third party. This is usually when title passes to the customer, either on shipment or on receipt of goods depending on the delivery terms of the customer contract. The performance obligation is satisfied when control has passed to the customer. The transaction price is specified in the customer contract. This treatment has not changed following the adoption of IFRS 15.

Sale of consignment inventory

Filtronic supports one of its customers by holding inventory in a third-party location near to the customer's production facility. Revenue is recognised when the goods have been moved out of the location by the customer and a consumption advice has been provided. The performance obligation is satisfied when control has passed to the customer. This treatment has not changed following the adoption of IFRS 15.

Non-recurring engineering ("NRE")

NRE comprises contracts to provide engineering services, such as the design and development of a product, funded by the customer. The transaction price of the contract is known from inception of the contract. Each contract is reviewed to identify the number of distinct performance obligations and the transaction price is assigned accordingly, usually by the value of work performed on an input cost basis. Based on the performance of the contract to date, revenue is recognised over time. If relevant, an expected loss on a contract is recognised immediately in the income statement.

The management review of the IFRS 15 five-step approach concluded that there are no material contracts which would require different treatment under IFRS 15 versus IAS 18 Revenue in the financial year.

Operating leases

Operating lease rentals are charged to the income statement on a straight line basis over the lease term.

Notes to the financial statements continued

for the year ended 31 May 2019

1 Accounting policies (continued)

Share-based payments
The Group operates equity settled share option schemes, under which share options are granted to certain employees.

The fair value of the share options at the date of grant was calculated using an option pricing model, taking into account the terms and conditions applicable to the option grant. The fair value of the number of share options expected to vest was expensed in the income statement on a straight-line basis over the expected vesting period. At each reporting period, these vesting expectations were revised as appropriate.

A credit was made to equity equal to the share-based payment charge in the period.

Exceptional items
Exceptional items are those significant items which are separately disclosed by virtue of their size or incidence to enable a full understanding of the financial results.

Business combinations
All business combinations are accounted for by applying the acquisition method. Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group.

The Group measures goodwill at the acquisition date as:

- The fair value of the consideration transferred; plus
- The recognised amount of any non-controlling interests in the acquiree; plus
- The fair value of any existing equity interest in the acquiree; less
- The net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

When the excess is negative, a gain is recognised immediately in the consolidated income statement.

Costs related to the acquisition, other than those associated with the issue of debt or equity securities, are expensed as incurred.

Any contingent consideration payable is recognised at fair value at the acquisition date. If the contingent consideration is classified as equity, it is not remeasured and settlement is accounted for within equity. Otherwise, subsequent changes to the fair value of the contingent consideration are recognised in the consolidated income statement. Where contingent consideration is linked to continued employment it is classified as an employment cost and recognised in the consolidated income statement over the relevant period.

On a transaction-by-transaction basis, the Group elects to measure non-controlling interests, which have both present ownership interests and are entitled to a proportionate share of net assets of the acquiree in the event of liquidation, at its proportionate interest in the recognised amount of the identifiable net assets of the acquiree at the acquisition date.

Investments in subsidiaries
Investments in subsidiaries are stated in the Company's financial statements at cost less any accumulated impairment losses.

Investments in subsidiaries are tested for impairment when there is an indication of impairment.

Goodwill
Goodwill that arises upon the acquisition of subsidiaries is included in intangible assets.

Goodwill is measured at cost less accumulated impairment losses.

Goodwill, which is allocated to cash-generating units, is tested for impairment at least annually and when there is an indication of impairment. The goodwill carrying value is written down to its recoverable amount. An impairment loss recognised for goodwill is not reversed in a subsequent period.

On disposal of a subsidiary, the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

Internally-generated intangible assets
All research costs are expensed as incurred.

Development costs chargeable to the customer are recognised as an expense in the same period as the associated customer revenue.

Development costs incurred on projects requiring product qualification tests to satisfy customer specifications are generally expensed as incurred, reflecting the technical risks associated with meeting the resultant product qualification test.

1 **Accounting policies** (continued)

Development costs incurred on projects are capitalised where firstly, the technical feasibility can be tested against relevant milestones, secondly, the probable revenue stream foreseen over the life of the resulting product can support the development, and thirdly, sufficient resources are available to complete the development. These capitalised costs are amortised on a straight-line basis over the expected life of the associated product.

Once a new product is in volume production, further development costs are expensed as they arise because they are incurred in response to continual customer demand to enhance the product functionality and to reduce product selling prices.

Other intangible assets

Other intangible assets that are acquired by the Group and have finite useful lives are measured at cost less accumulated amortisation and accumulated impairment losses.

Amortisation is calculated over the cost of the asset less its residual value.

Amortisation is recognised in the income statement on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date that they are available for use, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset.

The estimated useful lives for the current and comparative periods are as follows:

- Licences — Life of the licence/patent
- Software licence — 4 to 5 years

Amortisation methods, useful lives and residual values are reviewed at each financial year end and adjusted if appropriate.

Impairment charges

The carrying amounts of the Group's non-financial assets, other than inventories and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. For goodwill and intangible assets that have indefinite useful lives or that are not yet available for use, the recoverable amount is estimated each year at the same time. The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For the purposes of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit, or CGU"). Subject to an operating segment ceiling test, for the purposes of goodwill impairment testing, CGUs to which goodwill has been allocated are aggregated so that the level at which impairment is tested reflects the lowest level at which goodwill is monitored for internal reporting purposes.

An impairment loss is recognised if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount.

Impairment losses are recognised in the income statement. Impairment losses recognised in respect of CGUs are allocated first to reduce the carrying amount of any goodwill allocated to the units, and then to reduce the carrying amounts of the other assets in the unit (group of units) on a pro rata basis.

An impairment loss in respect of goodwill is not reversed. In respect of other assets, impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and less any accumulated impairment losses.

Depreciation is provided on a straight-line basis over the estimated useful lives of the assets as follows:

- Land — Not depreciated
- Buildings — 50 years
- Plant and equipment — 3 to 10 years
- Computer hardware — 2 to 4 years

Property, plant and equipment are tested for impairment when there is an indication of impairment. If impaired, the carrying values of the assets are written down to their recoverable amounts.

The gain or loss arising on disposal or scrappage of an asset is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in income.

Notes to the financial statements continued

for the year ended 31 May 2019

1 Accounting policies (continued)

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost comprises the weighted average cost of materials and components together with attributable direct labour and overheads. Net realisable value is the estimated selling price less estimated costs of completion and sale.

Trade and other receivables

Trade and other receivables are stated net of any provision for doubtful debts.

Cash and cash equivalents

Cash and cash equivalents comprise cash balances and bank deposits with an original maturity of three months or less.

Assets held for sale

Non-current assets, or disposal groups comprising assets and liabilities, are classified as held-for-sale if it is highly probable that they will be recovered primarily through sale rather than through continuing use.

Such assets, or disposal groups, are generally measured at the lower of their carrying amount and fair value less costs to sell. Any impairment loss on a disposal group is allocated first to goodwill, and then to the remaining assets and liabilities.

Once classified as held-for-sale, intangible assets are no longer amortised and property, plant and equipment are no longer depreciated.

Defined contribution pension schemes

Defined contribution pension schemes are operated for employees. Contributions are recognised as an expense in the income statement as incurred.

Financial liabilities

Other current financial liabilities comprise borrowings, lease agreements and trade and other payables, and are recognised initially at fair value and subsequently measured at amortised cost.

Current tax

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred taxation

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the Consolidated Statement of Financial Position and the corresponding tax bases used in the computation of taxable profit and is accounted for using the statement of financial position liability method. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

The carrying amount of deferred tax assets is reviewed at each statement of financial position 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 tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised based on tax laws and rates that have been enacted or substantively enacted at the statement of financial position date. Deferred tax is charged or credited in the income statement, except when it relates to items charged or credited in other comprehensive income, in which case the deferred tax is also dealt with in other comprehensive income. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Grants

Capital-based grants, when present, are included within deferred income in the balance sheet and credited to the profit and loss account over the estimated useful economic lives of the assets to which they relate.

Grants that compensate the Group for expenses incurred are recognised in profit or loss as other operating income on a systematic basis in the same periods in which the expenses are recognised.

1 Accounting policies (continued)

Warranty provision

A provision is recognised in the balance sheet when there is a present legal or constructive obligation as a result of a past event, and it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. A warranty provision is recognised when products are sold based on historical warranty data. The level of warranty provision required is reviewed on a product-by-product basis and adjusted accordingly in light of actual experience.

Dilapidations and onerous leases

A provision for dilapidations and onerous leases is recognised in the balance sheet on a lease-by-lease basis and is based on the Group's best estimates of the required cost to settle the obligations.

Share capital

Ordinary shares issued are classified as share capital in equity.

Dividends

Interim dividends are recognised in equity in the period they are paid. Final dividends are recognised in equity in the period they are approved by shareholders.

Forward currency contracts

Forward currency contracts are held at fair value. The gain or loss on re-measurement to fair value is recognised immediately in the consolidated income statement.

Accounting developments and new standards

IFRS 15 Revenue from contracts with customers

The impact of IFRS 15 is presented under 'Revenue' in this note of the Annual Report.

IFRS 9 Financial Instruments

The Group has adopted IFRS 9 Financial Instruments which is mandatory for years commencing on or after 1 January 2018. The Group does not believe that the new classification requirements have a material impact on its accounting for financial assets, financial liabilities, loans, investments in debt securities that are all managed on a fair value basis.

At the end of each reporting period, financial instruments are assessed for impairment. Any impairment charge is recognised in the profit and loss account.

Other standards not yet effective:

IFRS 16 Leases

IFRS 16 'Leases' has an effective date for annual periods beginning on or after 1 January 2019. The standard replaces IAS 17 and establishes principles for the recognition, measurement, presentation and disclosure of leases. IFRS 16 eliminates the classification of leases as either operating leases or finance leases and introduces a single lessee accounting model.

Lessees will recognise a right of use ('ROU') asset and a corresponding financial liability on the balance sheet. The asset will be amortised over the length of the lease and the financial liability measured at amortised cost. Lessor accounting remains substantially the same as under IAS 17. This will result in a change in the costs in the income statement over the life of the lease as depreciation and interest charges will replace the lease costs currently charged to the income statement. The depreciation will be charged on a straight-line basis; however, interest is charged on the outstanding lease liabilities and will therefore be higher in the earlier years and decrease over time.

The Group will adopt the modified approach to transition where the initial asset values will be equal to the present value of the future lease payments as at the date of transition. This will result in all existing operating leases being capitalised over their remaining lives, as if they had just been entered into, and the Group accounts will reflect an elevated interest charge following adoption. The cumulative effect of initially applying it is recognised as an adjustment to the opening balance of retained earnings and comparatives are not restated. The implementation is expected to increase assets by approximately £1.7m and increase financial liabilities by the same amount with no effect on net assets or retained earnings.

As at 31 May 2019, the Group had operating lease commitments of £2.1m (See note 34) primarily relating to property lease commitments for our facilities in Sedgefield, Yeadon, Taby, Suzhou and Salisbury with the remaining balance being attributable to office equipment.

Notes to the financial statements continued

for the year ended 31 May 2019

1 Accounting policies (continued)

On transition the Group's opening balance sheet position at 1 June 2019 will be adjusted for right-of-use assets by approximately £1.7m with corresponding lease liabilities of approximately £1.7m. EBITDA will increase by an estimated £0.4m in FY2020 as the pre-IFRS 16 rental charge is replaced by depreciation and interest.

The directors are currently considering the impact on the financial statements of the standards below that are issued but not yet effective.

- Annual Improvements to IFRS Standards 2015-2017 cycle – various standards;
- IAS 19 Employee Benefits – Amendments to plan amendments, curtailments and settlements;
- IFRIC 23 – Uncertainty over Income Tax Treatments;
- IAS 1 – Presentation of Financial Instruments – Amendments to the definition of material;
- IAS 8 – Accounting Policies, Changes in Accounting Estimates and Errors – Amendments to the definition of material;
- IFRS 3 – Business Combinations – Amendments to clarify the definition of a business; and
- IFRS 17 – Insurance contracts.

The directors anticipate that the adoption of these standards and interpretations in future periods will have no material impact on their financial statements of the Group. Other new standards and interpretations in the year have not been included in the list above as they are not considered relevant to the Group.

2 Accounting estimates and judgements

The preparation of the financial statements requires the use of accounting estimates and judgements, that affect the application of accounting policies and reported amounts of assets and liabilities, income and expenses. The accounting estimates and judgements are continually evaluated. They are based on historical experience and other factors, including expectations of the future, that are believed to be reasonable under the circumstances. Actual results may differ from the expected results.

The accounting estimates and judgements that have a significant effect on the financial statements are considered below.

Goodwill and other intangibles—impairment

Goodwill and other intangibles are tested for impairment by reference to the expected cash generated by the business unit. This is deemed to be the best approximation of value, but is subject to the same uncertainties as the cash flow forecast being used.

Investments in subsidiaries

Investments in subsidiaries are tested for impairment by reference to the expected cash generated by the business unit. This is deemed to be the best approximation of value, but is subject to the same uncertainties as the cash flow forecast being used.

Inventory

Inventories are stated at the lower of cost and net realisable value. The assessment of the net realisable value of inventory requires forecasts of the future demand and selling prices of inventory based on sales order book, market intelligence and inventory ageing.

Debtors

In line with industry practice, Filtronic extends credit terms to its customers. Due to the concentration of debtors, the effect of any one debtor defaulting would be material to the Group's financial statements. Estimates and judgements are made when valuing the debtor as to its recoverability based on historical data, ageing of debts and market intelligence of our customers. A bad debt provision is created when it is unlikely the debt will be recovered.

Deferred tax asset

The recognition of the deferred tax assets relating to tax losses carried forward depends on forecasts of the future taxable profits of the Company and its subsidiaries. These forecasts require the use of estimates and judgements about the future performance of the Company and its subsidiaries using the current order book, forecasts and market knowledge.

Warranty provision

Warranties are given to customers on products sold to them. A warranty provision is recognised when products are sold and is based on historical warranty data. Actual warranty costs in the future may differ from the estimates based on historical performance. The level of warranty provision required is reviewed on a product-by-product basis and adjusted accordingly in light of actual experience. Although the warranty provision has increased in the year this does not raise the level of estimation uncertainty as the increase is a result of a fixed settlement agreement.

Capitalisation of development costs

In line with the requirements of IFRS, the Group's policy is to capitalise development expenditure as intangible assets when all the following criteria are met:

- The technical feasibility of completing the asset so that it will be available for use or sale;
- The intention to complete the asset and use or sell it;
- The ability to use or sell the asset;
- The asset will generate probable future economic benefits and demonstrate the existence of a market or the usefulness of the asset, if it is to be used internally;
- The availability of adequate technical, financial and other resources to complete the development and to use or sell it; and
- The ability to measure reliably the expenditure attributable to the intangible asset.

This process is continually reviewed to ascertain whether any development costs meet the criteria for capitalisation. This requires various judgements by management as to whether the various criteria have been met. The period over which development costs are amortised is reviewed on a case-by-case basis in line with the expected product life.

Notes to the financial statements continued

for the year ended 31 May 2019

3 Segmental analysis

Operating segments

IFRS 8 requires consideration of the identity of the chief operating decision maker ('CODM') within the Group. In line with the Group's internal reporting framework and management structure, the key strategic and operating decisions are made by the CEO, who reviews internal monthly management reports, budget and forecast information as part of this. Accordingly, the CEO is deemed to be the CODM.

Following the reorganisation of the business in the last financial year, merging the Filtronic Broadband and Filtronic Wireless businesses, the CODM has identified one operating segment within the Group as defined under IFRS 8. In turn, this is the only reportable segment of the Group as the entities in the Group have similar products and services, production processes and economic characteristics. Therefore, there is no allocation of operating expenses, profit measures or assets and liabilities to specific commercial markets.

Accordingly, the CODM assesses the performance of the operating segment on financial information which is measured and presented in a manner consistent with those in the financial statements by reference to Group results against budget.

The Group profit measures are operating profit and EBITDA, both disclosed on the face of the consolidated income statement. No differences exist between the basis of preparation of the performance measures used by management and the figures in the Group financial statements.

The Group has four customers representing individually over 10% of revenue each and in aggregate 86% of revenue. This is split as follows:

- Customer A - 25%
- Customer B - 24%
- Customer C - 22%
- Customer D - 15%

Geographical information

In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers. Segment assets are based on the geographical location of the assets.

	Continuing operations		Discontinuing operations		Total	
Revenue by destination	**2019 £000**	2018 £000	**2019 £000**	2018 £000	**2019 £000**	2018 £000
United Kingdom	**3,658**	2,529	**-**	-	**3,658**	2,529
Europe	**4,818**	2,588	**-**	2,310	**4,818**	4,898
Americas	**4,913**	13,727	**4,504**	53	**9,417**	13,780
Rest of the world	**2,543**	2,788	**134**	-	**2,677**	2,788
	15,932	21,632	**4,638**	2,363	**20,570**	23,995

Split of non-current assets by location	**2019 £000**	2018 £000
United Kingdom	**1,898**	4,797
Europe	**-**	76
Americas	**2,361**	1,256
Rest of the world	**-**	151
	4,259	6,280

Non-current assets relate to property, plant and equipment, intangible assets and deferred tax.

4 Operating profit from continuing operations

	2019 £000	Restated 2018 £000
Revenue	**15,932**	21,632
Material cost of goods sold	**8,073**	11,439
Wages and salaries	**4,105**	3,965
Social security costs	**434**	392
Pension costs	**239**	232
Share-based payments	**29**	25
Staff costs	**4,807**	4,614
Amortisation of development costs	**38**	33
Amortisation of other intangible assets	**37**	45
Depreciation	**355**	367
Depreciation and amortisation	**430**	445
Other operating income	**(152)**	(229)
Other expenses	**2,540**	2,164
Total operating costs	**7,625**	6,994
Operating profit	**234**	3,199

5 Discontinuing operations

Discontinuing operations is the loss for the period relating to the Telecoms Antenna Operation which is currently held for sale. The result for the year includes the warranty provision for the settlement agreement as described in note 24.

	2019 £000	2018 £000
Revenue	**4,638**	2,363
Material cost of goods sold	**3,393**	1,417
Wages and salaries	**1,770**	1,457
Social security costs	**274**	331
Pension costs	**245**	155
Staff costs	**2,289**	1,943
Amortisation of development costs	**141**	62
Amortisation of other intangible assets	**1**	1
Impairment of intangible assets	**512**	-
Depreciation	**104**	175
Depreciation and amortisation	**758**	238
Exceptional warranty charge	**1,584**	-
Other expenses	**121**	191
Total operating costs	**4,752**	2,372
Operating loss	**(3,507)**	(1,426)
Taxation	**(40)**	(57)
Loss for the period from discontinuing operations	**(3,547)**	(1,483)

Notes to the financial statements continued

for the year ended 31 May 2019

6 Exceptional items

Finance costs is stated after charging exceptional items as follows:

	2019 £000	2018 £000
Revaluation of foreign currency denominated intercompany balance	-	486
	-	486

7 Operating items

	2019 £000	Restated 2018 £000
Operating profit is stated after charging/(crediting):		
Depreciation of property, plant and equipment	355	367
Research and development costs before capitalisation/amortisation of development costs	1,238	1,697
Development costs capitalised	(250)	-
Amortisation of development costs	38	33
Amortisation of other intangibles	37	45
Operating lease rentals	284	269
Foreign exchange gain	(27)	(82)

8 Auditor's remuneration

The Company's auditor is PricewaterhouseCoopers LLP. The auditor's remuneration was as follows:

	2019 £000	2018 £000
Company auditor:		
Audit of the Group and Company financial statements	25	20
Company auditor and their associates:		
Audit of subsidiaries' financial statements pursuant to legislation	44	44
Other services pursuant to such legislation	2	2
Other services	-	2
	71	68

9 Employees

The average number of employees comprised:

	Continuing operations		Discontinuing operations		Group	
	2019 Number	2018 Number	2019 Number	2018 Number	2019 Number	2018 Number
Manufacturing	62	53	13	14	75	60
Research and development	17	27	13	12	30	46
Sales	6	4	2	2	8	6
Administration	15	12	3	2	18	14
	100	96	31	30	131	126

10 Compensation of directors

Details of the remuneration, pension entitlements and share options of the individual directors are set out in the Directors' remuneration report on pages 27 to 29. The compensation of the directors was:

	2019 £000	2018 £000
Salary or fees	374	347
Long term incentives	47	-
Benefits	19	19
Total remuneration excluding pension contributions and share-based payments	440	366
Pension contributions	20	20
	460	386

The Directors remuneration is paid through the Company.

The schedule 5 disclosure requirements are included in the Directors' remuneration report. The elements that are audited are identified as such in that report.

11 Related party transactions

Identity of related parties

The Group has a related party relationship with its subsidiaries and with its directors.

Transactions with subsidiaries

The main transactions between the Company and its subsidiaries are management administration recharges to its subsidiaries of £432,000 (2018: £432,000) and a royalty charge of 1% of sales of filters and antennas to Filtronic Wireless Limited of £184,000 (2018: £184,000). These intercompany transactions are eliminated on consolidation.

The Company also acts as a central service to distribute money around the Group to ensure subsidiaries are adequately funded to meet obligations and to invest funds from subsidiaries where surplus cash exists. The total figures for these transactions along with the management and royalty charge can be seen in notes 21 and 23 through the movement in the Company's intercompany receivables and payables.

Transactions with key management personnel

Key management personnel are considered to be the Executive Directors of the Company. The remuneration given to these individuals is disclosed in the Directors' remuneration report on pages 27 to 29.

12 Finance costs

	2019 £000	2018 £000
Interest costs on loans for plant and equipment	19	10
Minimum service costs and interest charges on invoice discounting facilities	69	51
Revaluation of foreign currency denominated intercompany balance	66	486
	154	547

13 Finance income

	2019 £000	2018 £000
Revaluation of foreign currency denominated intercompany balance	55	-
	55	-

Notes to the financial statements continued

for the year ended 31 May 2019

14 Taxation

Recognised in the income statement	2019 £000	2018 £000
Current tax credit		
Overseas taxation in the period	268	188
Adjustment in respect of prior year — R&D tax credit	(728)	(243)
R&D tax credit	(628)	-
Total current tax credit	(1,088)	(55)
Deferred tax credit		
Origination and reversal of temporary differences	(971)	(93)
Change of corporation tax rate	-	143
Total deferred tax (credit)/charge	(971)	50
Income tax credit	(2,059)	(5)

Income tax credit is attributable to:	2019 £000	2018 £000
Continuing operations	(2,099)	(62)
Discontinuing operations	40	57
	(2,059)	(5)

The reconciliation of the effective tax rate is as follows:

	2019 £000	2018 £000
Profit before tax from continuing operations	135	2,652
Loss before tax from discontinuing operations	(3,507)	(1,426)
(Loss)/profit before taxation	(3,372)	1,226

		2019 £000		2018 £000
(Loss)/profit before taxation multiplied by standard rate of corporation tax in the UK (19%)	(19%)	(640)	19%	319
Disallowable items	7%	231	9%	157
Income not taxable	0%	6	(1%)	(18)
Deferred tax asset not recognised	23%	777	14%	237
Impact of tax rate change on deferred tax	-	-	9%	143
Enhanced R&D tax credit	(19%)	(628)	(4%)	(67)
Adjustment in respect of prior year R&D tax credit	(22%)	(728)	(14%)	(243)
Foreign tax not at UK rate	4%	138	11%	188
Recognition of deferred tax asset previously unrecognised	(7%)	(244)	(6%)	(93)
Recognition of deferred tax asset from prior year	(29%)	(971)	(37%)	(628)
Taxation	(62%)	(2,059)	0%	(5)

The main rate of UK corporation tax for the financial year was 19%. This will reduce to 17% from 1 April 2020. The US federal corporate tax rate was 21%. The deferred tax assets recognised in the year have been calculated at the rates expected to be in existence in the period of reversal.

15 Earnings/(loss) per share

	Continuing operations		Discontinuing operations		Total Group	
	2019 £000	2018 £000	**2019 £000**	2018 £000	**2019 £000**	2018 £000
Profit/(loss) for the period	**2,234**	2,657	**(3,547)**	(1,426)	**(1,313)**	1,231

	000	000	**000**	000	**000**	000
Basic weighted average number of shares	**207,578**	206,910	**207,578**	206,910	**207,578**	206,910
Dilution effect of share options	**3,370**	3,219	**-**	3,219	**-**	3,219
Diluted weighted average number of shares	**210,948**	210,129	**207,578**	210,129	**207,578**	210,129
Basic earnings/(loss) per share	**1.06p**	1.28p	**(1.71)p**	(0.69)p	**(0.63)p**	0.59p
Diluted earnings/(loss) per share	**1.06p**	1.28p	**(1.71)p**	(0.68)p	**(0.63)p**	0.59p

Notes to the financial statements continued

for the year ended 31 May 2019

16 Investments in subsidiaries

	Company investments in subsidiaries £000
Cost	
At 1 June 2017, 31 May 2018 and 31 May 2019	21,110
Impairment	
At 1 June 2017, 31 May 2018 and 31 May 2019	(10,546)
Carrying amount at 1 June 2017, 31 May 2018 and 31 May 2019	10,564

The Company's subsidiaries are related parties.

The subsidiaries at 31 May 2019, which were owned by Filtronic plc, were as follows:

Name of subsidiary	Country of incorporation	Description of equity held	Proportion held	Activity
Filtronic Broadband Limited[1]	UK	1p ordinary shares	100%	Design and manufacture of microwave products for telecommunication systems
Filtronic Holdings UK Limited[1]	UK	£1 ordinary shares	100%	Holding Company
Isotek (Holdings) Limited[1]	UK	1p ordinary shares	100%	Holding Company
Filtronic Inc[2]	USA	US$1 ordinary shares	100%	Dormant Company
Owned by Filtronic Holdings (UK) Limited:				
Filtronic Wireless AB[3]	Sweden	SEK1 ordinary shares	100%	Design and manufacture of antenna products for telecommunication systems
Owned by Isotek (Holdings) Limited:				
Filtronic Wireless Limited[1]	UK	1p ordinary shares	100%	Design and manufacture of filters and related products for telecommunication systems
Filtronic Wireless Inc.[2]	USA	US$1 ordinary shares	100%	Design and manufacture of filters and related products for telecommunication systems
Isotek Limited[1]	UK	1p ordinary shares	100%	Dormant Company
Owned by Filtronic Wireless Limited:				
Isotek Hong Kong Holdings Limited[4]	Hong Kong	HK$1 ordinary shares	100%	Holding Company
Owned by Isotek Hong Kong Holdings Limited:				
Isotek Suzhou Limited[5]	China	US$350,000 paid in share capital	100%	Design and manufacture of filters and related products for telecommunication systems
Filtronic Wireless Suzhou[5]	China	US$162,000 paid in share capital	100%	Design and manufacture of filters and related products for telecommunication systems

[1] Filtronic House, 3 Airport West, Lancaster Way, Yeadon, Leeds, West Yorkshire, LS19 7ZA, UK
[2] 700 Marvel Road, Salisbury, Maryland, 21801, USA
[3] Antennvägen 6A, 18766, Täby, Sweden
[4] RM 1501, C1 Grand Millennium Plaza (lower block), 181 Queen's Road Central, Hong Kong
[5] RM 802, Block 1, No. 135 Wangdun Road, SIP, Suzhou, China

17 Goodwill and other intangibles

Group	Goodwill £000	Other intangibles (core technology) £000	Licence agreement £000	Software costs £000	Development costs £000	Total £000
Cost						
At 1 June 2017	3,235	10,884	160	567	286	15,132
Additions	-	-	-	19	436	455
Disposals	-	-	-	(30)	-	(30)
Currency translation movement	-	-	-	(13)	-	(13)
At 31 May 2018	3,235	10,884	160	543	722	15,544
Additions	-	-	-	11	666	677
Reclassification to assets held for sale	(2,261)	-	(160)	(27)	(1,038)	(3,486)
Currency translation movement	-	-	-	15	-	15
At 31 May 2019	**974**	**10,884**	**-**	**542**	**350**	**12,750**
Amortisation						
At 1 June 2017	-	10,884	48	515	95	11,542
Disposals	-	-	-	(30)	-	(30)
Currency translation movement	-	-	-	(13)	-	(13)
Provided in the year	-	-	15	31	95	141
At 31 May 2018	-	10,884	63	503	190	11,640
Provided in the year	-	-	14	24	179	217
Impairment of intangible assets	-	-	-	-	512	512
Reclassification to assets held for sale	-	-	(77)	(25)	(779)	(881)
Currency translation movement	-	-	-	15	-	15
At 31 May 2019	**-**	**10,884**	**-**	**517**	**102**	**11,503**
Carrying amount at 1 June 2017	3,235	-	112	52	191	3,590
Carrying amount at 31 May 2018	3,235	-	97	40	532	3,904
Carrying amount at 31 May 2019	**974**	**-**	**-**	**25**	**248**	**1,247**

	Group		Company	
Reconciliation of amortisation of other intangible assets	**2019 £000**	2018 £000	**2019 £000**	2018 £000
Amortisation of licence agreement	**14**	15	**-**	15
Amortisation of software costs	**24**	31	**15**	13
Amortisation of other intangible assets	**38**	46	**15**	28

The Company accounts include the software costs of £19,000 (2018: £25,000). The RET licence has been moved from the Company to Filtronic Wireless Inc. (2018: £97,000).

Goodwill and other intangibles relate to the acquisition of Isotek (Holdings) Limited. Goodwill is allocated to the Filtronic Wireless CGU and this CGU represents the lowest level within the Group at which the goodwill is monitored for internal management purposes. The Group tests goodwill annually for impairment or more frequently if there are indications that goodwill may be impaired.

The carrying value of intangible assets and goodwill has been assessed for impairment by reference to its value in use. Value in use was determined by discounting the future cash flows generated from the continuing use of the unit. The calculation of the value in use was based on the following key assumptions:

- Budgets incorporating post-tax cash flows have been prepared to 31 May 2020 based on past experience, actual operating results, known future cash flows and estimates of future cash flows;

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17 Goodwill and other intangibles (continued)

- Cash flows for a further three years have been extrapolated from the year to 31 May 2020. A revenue growth factor of 3% was applied to the projections together with cost inflation of 3%. A perpetuity factor has been applied based on the year to 31 May 2024; and

- The Group's discount rate of 12% (2018:12%) was applied in determining the recoverable amount of the unit, being the estimated weighted average cost of capital for the Filtronic Wireless CGU.

Based on this testing the directors do not consider any of the goodwill or intangible assets to be impaired, even allowing for a reasonable degree of sensitivity to the underlying assumptions, including the discount rate. However, following a review of the goodwill calculation an allocation to assets held for sale of £2.3m has been made as part of IFRS 5 accounting given the filter know-how utilised within the integrated antenna products.

The licence agreement relates to a Remote Electrical Tilt ("RET") licence to enable the use of RETs in the antenna products.

The accounting policy for intangible assets relating to the capitalisation of development costs is set out in notes 1 and 2.

18 Property, plant and equipment

	Group plant and equipment £000	Company plant and equipment £000
Cost		
At 1 June 2017	7,255	-
Additions	604	-
Disposals	(457)	-
Currency translation movement	(31)	-
At 31 May 2018	7,371	-
Additions	380	-
Disposals	(507)	-
Reclassification to assets held for sale	(667)	-
Currency translation movement	19	-
At 31 May 2019	**6,596**	**-**
Depreciation and impairment		
At 1 June 2017	5,901	-
Depreciation	542	-
Disposals	(456)	-
Currency translation movement	(27)	-
At 31 May 2018	5,960	-
Depreciation	459	-
Disposals	(435)	-
Reclassification to assets held for sale	(430)	-
Currency translation movement	12	-
At 31 May 2019	**5,566**	-
Carrying amount at 1 June 2017	1,354	-
Carrying amount at 31 May 2018	1,411	-
Carrying amount at 31 May 2019	**1,030**	**-**

19 Deferred tax

Deferred tax assets	Group 2019 £000	Group 2018 £000
Opening balance	**965**	1,015
Tax losses recognised	**971**	93
Effect of change in UK corporation tax rate	**-**	(42)
Effect of change in overseas corporation tax rate	**-**	(101)
Effect of exchange rate movement	**46**	-
	1,982	965

Deferred tax assets within the UK and the USA have been recognised as the directors consider that future taxable profits will be available against which they can be used. Future taxable profits are determined based on business plans for individual subsidiaries in the Group and the reversal of temporary differences. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised; such deductions are reversed when the probability of future taxable profits improves.

Deferred tax assets which have not been recognised:	Group 2019 £000	Group 2018 £000	Company 2019 £000	Company 2018 £000
Depreciation in advance of capital allowances	**1,957**	2,161	**455**	457
Tax losses carried forward	**10,817**	11,121	**9,449**	9,322
Share options deferment	**91**	95	**91**	95
	12,865	13,377	**9,995**	9,874

The deferred tax assets have not been recognised where the directors consider that it is unlikely that future taxable profits will be available against which they can be used. There is no expiry date for these unrecognised deferred tax assets which are reassessed at each reporting date.

20 Inventories

	Group 2019 £000	Group 2018 £000	Company 2019 £000	Company 2018 £000
Raw materials	**2,408**	2,895	**-**	-
Work in progress	**518**	282	**-**	-
Finished goods	**254**	128	**-**	-
	3,180	3,305	**-**	-
Inventory provision	**(1,099)**	(1,167)	**-**	-
Inventories are stated net of provision	**2,081**	2,138	**-**	-

Raw materials, consumables and changes in finished goods and work in progress recognised in cost of sales in the year amounted to £7,773,000 (2018: £12,756,000).

The amount charged to the income statement in the year in respect of write-downs of inventories is £nil (2018: £nil). The amount credited to the income statement in the year in respect of reversals of write-downs of inventories is £nil (2018: £72,000).

Notes to the financial statements continued

for the year ended 31 May 2019

21 Trade and other receivables

	Group		Company	
	2019 £000	2018 £000	**2019 £000**	2018 £000
Trade receivables	**2,419**	5,736	**-**	-
Group receivables	**-**	-	**6,105**	11,479
Other receivables and prepayments	**1,801**	652	**43**	49
	4,220	6,388	**6,148**	11,528

There are no provisions for bad debt.

The Group receivables in the Company were reviewed in the year for expected credit losses as part of IFRS 9 recoverability. The balance was impaired where it was deemed the intercompany entity was unable to repay its debt.

22 Assets held for sale

It was announced in December 2018 that a strategic review would be conducted of the Telecoms Antenna business. The directors are now committed to a plan to try and sell this part of the business with a process now in place. Consequently, this part of the business is presented as a disposal group held for sale.

The accounting standard, IFRS 5, dictates that a disposal group should be valued at the lower of carrying value or fair value less costs. At 31 May 2019, the disposal group is stated at carrying value and is comprised of the following assets and liabilities:

	2019 £000	2018 £000
Goodwill and other intangible assets	2,605	-
Property, plant and equipment	237	-
Inventory	406	-
Trade and other receivables	1,798	-
Assets held for sale	**5,046**	-

	£000	**£000**
Trade and other payables	2,207	-
Liabilities held for sale	**2,207**	-

23 Trade and other payables

	Group		Company	
	2019 £000	2018 £000	**2019 £000**	2018 £000
Trade payables	**1,364**	3,712	**74**	52
Group payables	**-**	-	**-**	4,914
Other payables and accruals	**952**	1,364	**350**	407
	2,316	5,076	**424**	5,373

The Group payables in the Company were reviewed in the year for expected credit losses as part of IFRS 9 recoverability. The balance was impaired where it was deemed the Company was unable to repay its debt.

24 Provisions

	Group		Company	
Warranty provision	**2019 £000**	2018 £000	**2019 £000**	2018 £000
Opening balance	**425**	475	**-**	-
Used during the year	**(11)**	(18)	**-**	-
Released unused during the year	**(45)**	(79)	**-**	-
Charge for the year	**1,836**	47	**-**	-
	2,205	425	**-**	-

The provision for warranty relates to the units sold during the last two financial years. The provision is based on estimates made from historical warranty data.

The warranty charge in the year relates to performance issues of antenna product seen in the field that were shipped in 2016/17 and settles the warranty costs relating to field returns in the affected areas. A settlement agreement has been agreed with the customer which obliges the Group to contribute towards costs of $2.0m (£1.6m). This finalises the liability with the customer under the warranty claim and will be paid in four instalments with the final payment being made in December 2020.

	Group		Company	
Dilapidation provision	**2019 £000**	2018 £000	**2019 £000**	2018 £000
Opening balance	**60**	70	**-**	-
Released unused during the year	**-**	(10)	**-**	-
	60	60	**-**	-

The Group leases facilities at five sites in the UK, USA, China and Sweden with each lease requiring the site to be restored to its original condition.

Total provision	**2019 £000**	2018 £000	**2019 £000**	2018 £000
Warranty provision	**2,205**	425	**-**	-
Dilapidation provision	**60**	60	**-**	-
	2,265	485	**-**	-

25 Deferred income

Deferred income classified as current consists of billings in advance of work completed for a customer that will be recognised as income in the next year.

Notes to the financial statements continued

for the year ended 31 May 2019

26 Financial liabilities

This note provides information about the contractual terms of the Group's interest-bearing bank loans and borrowings which are measured at carrying value.

	Group		Company	
	2019 £000	2018 £000	2019 £000	2018 £000
Bank loans—current	100	100	-	-
Obligations under finance leases—current	131	106	-	-
Total current financial liabilities	231	206	-	-
Bank loans—non-current	17	117	-	-
Obligations under finance leases—non-current	101	195	-	-
Total non-current financial liabilities	118	312	-	-
Total financial liabilities	349	518	-	-

Terms and debt repayment schedule

	Currency	Nominal interest rate	Date of maturity	Carrying amount 2019 £000	Carrying amount 2018 £000
Bank loan	GBP	7.6%	31 August 2020	117	217
Finance lease	GBP	4.1%	31 May 2021	232	301

Future minimum lease payments under finance leases, together with the carrying amount of lease obligations, are analysed as follows:

	Group		Company	
Finance lease	2019 £000	2018 £000	2019 £000	2018 £000
Less than one year	131	106	-	-
Between one and five years	101	195	-	-
	232	301	-	-

Debt reconciliation	Bank loans £000	Finance lease £000	Total £000
Balance at 1 June 2017	-	-	-
Proceeds from bank loans	300	-	300
Proceeds from finance leases	-	301	301
Interest paid	(10)	-	(10)
Repayment of borrowings	(73)	-	(73)
Balance at 31 May 2018	217	301	518
Acquisition finance leases	-	31	31
Interest paid	(12)	(6)	(18)
Repayment of borrowings	(88)	(94)	(182)
Balance at 31 May 2019	117	232	349

26 Financial liabilities (continued)

Banking facilities

At 31 May 2019, the Group had an undrawn invoice discount facility with Barclays Bank of £3.0m which enables it to borrow up to 65% of the debtor book in the UK. In addition to the facility with Barclays Bank, the Group has a facility with Wells Fargo Bank of $4.0m enabling it to borrow up to 85% of the US debtor book.

The bank loan, with a current carrying value of £117k, relates to an asset-based loan for plant and equipment at our facility in Sedgefield.

27 Share capital

	Group and Company ordinary shares of 0.1p each	
	Number	£000
At 1 June 2017 and 31 May 2018	**206,910**	**10,788**
Exercise of share options	1,219	1
At 31 May 2019	**208,129**	**10,789**

Holders of the ordinary shares are entitled to receive dividends when declared, and are entitled to one vote per share at meetings of the Company.

28 Share premium

	Group and Company
At 1 June 2017 and 31 May 2018	**10,640**
Exercise of share options	**75**
At 31 May 2019	**10,715**

29 Translation reserve

	Group £000
At 1 June 2017	**(796)**
Currency translation movement arising on consolidation	178
At 1 June 2018	**(618)**
Currency translation movement arising on consolidation	60
At 31 May 2019	**(558)**

The translation reserve comprises foreign currency differences arising from the translation of the financial statements of foreign operations.

30 Dividends

The directors are not proposing to pay a dividend for the year ended 31 May 2019 (2018: £nil).

31 Retained earnings

	Group £000	Company £000
At 1 June 2017	**(9,905)**	**(3,555)**
Profit/(loss) for the period	1,231	(695)
Share-based payments	25	5
At 31 May 2018	**(8,649)**	**(4,245)**
Loss for the period	(1,313)	(819)
Share-based payments	29	63
At 31 May 2019	**(9,933)**	**(5,001)**

Notes to the financial statements continued

for the year ended 31 May 2019

32 Share options

There are six sharesave plans that have been offered to employees at the date of this report. The first five schemes offered to employees have now closed. Under these plans employees who join the plan save up to £500 per month for three years. The members of the plans were granted a number of share options based on the amount they would save over the three years. At the end of the three years, the members have a six-month period in which they can exercise the share options. The exercise price for an option for the first five schemes was the middle market quotation of Filtronic plc's ordinary shares as derived from the Official List of London Stock Exchange on the dealing day immediately prior to the plan offer date. The sixth scheme had an exercise price calculated by reference to the average of the middle market closing price of the shares on AIM for the three dealing days prior to the invitation date.

Sharesave Plan—Scheme 5

	Weighted average exercise price 2019	**Number of options 2019**	Weighted average exercise price 2018	Number of options 2018
Outstanding at the beginning of the period	**31.0p**	**-**	31.0p	78,383
Cancelled during the period	**31.0p**	**-**	31.0p	(78,383)
Outstanding at the end of the period	**31.0p**	**-**	31.0p	-
Exercisable at the end of the period	**31.0p**	**-**	31.0p	-

The fifth sharesave scheme was offered to employees in June 2014 and has now closed.

Sharesave Plan—Scheme 6

	Weighted average exercise price 2019	**Number of options 2019**	Weighted average exercise price 2018	Number of options 2018
Outstanding at the beginning of the period	**5.2p**	**5,965,899**	5.2p	6,079,289
Exercised during the period	**5.2p**	**(96,135)**	5.2p	-
Cancelled during the period	**5.2p**	**(42,299)**	5.2p	(113,390)
Outstanding at the end of the period	**5.2p**	**5,827,465**	5.2p	5,965,899
Exercisable at the end of the period	**5.2p**	**5,827,465**	5.2p	-

A sixth sharesave scheme was offered to employees in June 2016.

The options outstanding at 31 May 2019 for Scheme 6 have a weighted average remaining contractual life of 0.5 years. The share options granted during the year to May 2017 have an exercise price of 5.2p and have an exercise period from 1 June to 30 November 2019.

32 Share options (continued)

Management incentive plans

The options granted in the year to directors, key management and staff have specific performance targets attached to them. The target requires that the average mid-market closing price of a share over any period of 40 consecutive business days between the date of grant and the third anniversary of the date of grant is greater than 20 pence per share. Directors can only exercise their shares three years after grant after the target has been met. All other staff can exercise their shares in three equal tranches after each year if the performance target has been met during the relevant financial year. The exercise price for an option was the middle market quotation of Filtronic plc's ordinary shares as derived from the Official List of the London Stock Exchange or AIM depending on the timing of the award and the market Filtronic traded on the dealing day immediately prior to the plan offer date. The Remuneration Committee is able to adjust the outcome at its discretion to ensure it is fair and appropriate, taking into account the overall performance of the Group.

The following options under this scheme were outstanding at 31 May 2019:

Ordinary shares of 0.1p	Date granted	Earliest date exercisable	Latest date exercisable	Exercise price
4,100,251	01/03/2016	01/03/2017	28/02/2026	5.4p
300,000	01/03/2016	01/03/2017	28/02/2026	5.7p
300,000	11/04/2016	11/04/2017	10/04/2026	8.5p
383,333	30/09/2016	30/09/2017	29/09/2026	11.6p
200,000	28/09/2017	28/09/2018	27/09/2027	13.0p
200,000	28/03/2018	28/03/2019	27/03/2028	9.0p
5,483,584				

The weighted average price of options of the outstanding options under this scheme at 31 May 2019 was 6.41p.

	Number of share options 2019	Number of share options 2018
Outstanding at the beginning of the period	**6,906,250**	6,925,000
Granted during the period	**-**	400,000
Cancelled during the period	**(300,000)**	(418,750)
Exercised during the period	**(1,122,666)**	-
Outstanding at the end of the period	**5,483,584**	6,906,250
Exercisable at the end of the period	**5,085,251**	-

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for the year ended 31 May 2019

33 Share-based payments

	Group		Company	
	2019 £000	2018 £000	2019 £000	2018 £000
Share options expense	29	25	63	5
	29	25	63	5

The share options expense is the fair value of the share options at the date of grant spread over the expected vesting period of the share options. The fair value of the share options at the date of grant was measured using the Black–Scholes model.

The inputs to the Black–Scholes model and the weighted average fair value of the share options granted during the year were as follows:

	Group		Company	
	2019	2018	2019	2018
Number of share options granted	-	400,000	-	400,000
Weighted average share price	-	11.0p	-	11.0p
Expected volatility	-	50%	-	50%
Expected life	-	3.0 years	-	3.0 years
Risk-free interest rate	-	0.5%	-	0.5%
Weighted average fair value	-	1.0p	-	1.0p

Expected volatility is the estimate of the volatility of the share price over the expected life of the share options.

34 Operating lease commitments

At the balance sheet date, there were commitments for lease payments under non-cancellable operating leases, which fall due as follows:

	Group		Company	
	2019 £000	2018 £000	2019 £000	2018 £000
Less than one year	320	264	-	-
Between one and five years	1,156	668	-	-
More than five years	583	-	-	-
	2,059	932	-	-

The Group leases a number of facilities, offices and vehicles under non-cancellable operating leases. The lease terms are for periods of one to ten years.

35 Pension costs

	Group		Company	
	2019 £000	2018 £000	2019 £000	2018 £000
Defined contribution schemes	485	386	38	37

36 Capital expenditure commitments

	Group 2019 £000	Group 2018 £000	Company 2019 £000	Company 2018 £000
Capital expenditure contracted for at the balance sheet date but not provided in the financial statements	**134**	259	**-**	-

37 Analysis of net cash/(debt)

	1 June 2018 £000	Cash flow £000	Other changes £000	**31 May 2019 £000**
Cash and cash equivalents	3,794	(1,227)	58	**2,625**
Bank loans	(217)	100	-	**(117)**
	3,577	(1,127)	58	**2,508**

Reconciliation of cash flow to movement in net cash

	2019 £000	2018 £000
Movement in cash and cash equivalents	**(1,227)**	1,206
Cash flow from decrease /(increase) in debt financing	**100**	(217)
Effect of exchange rate fluctuations	**58**	(10)
Movement in net cash	**(1,069)**	979
Opening net cash	**3,577**	2,598
Closing net cash	**2,508**	3,577

Notes to the financial statements continued

for the year ended 31 May 2019

38 Financial instruments

Fair value

The carrying amount of all the financial assets and liabilities approximates to their fair value as described below.

Cash and cash equivalents comprise bank balances and bank deposits with a maturity of three months or less.

Trade and other receivables are all receivable in less than one year. Trade receivables are generally receivable within 90 days.

Trade and other payables are all payable in less than one year. Trade payables are generally payable within 90 days.

Liquidity risk

The Group has net cash of £2.5m whilst the Company has net cash of £0.2m. The Group has access to a £3.0m sales invoicing facility with Barclays Bank and a $4.0m invoice factoring facility with Wells Fargo Bank.

Cash is held on bank deposit for varying periods from overnight to six months to ensure all liabilities can be met as they fall due.

The sales invoicing facility with Barclays Bank allows the Company to borrow 65% of the UK entities' debtors denominated in US dollars and sterling up to a value of £3.0m.

The sales invoice factoring facility with Wells Fargo Bank allows the Company to borrow 85% of the US entities' debtors denominated in US dollars up to a value of $4.0m.

The amount of cash available to the Group and the headroom available on debt facilities results in a low liquidity risk.

Credit risk

The exposure to credit risk is limited to the carrying amount of cash and cash equivalents and trade and other receivables in the balance sheet as follows:

	Group		Company	
	2019 £000	2018 £000	**2019 £000**	2018 £000
Cash and cash equivalents	**2,625**	3,794	**196**	342
Trade and other receivables	**4,220**	6,388	**6,148**	11,528
	6,845	10,182	**6,344**	11,870

The cash and cash equivalents in the balance sheet were on deposit with large banks with high credit ratings as follows:

	Group		Company	
	2019 £000	2018 £000	**2019 £000**	2018 £000
Barclays Bank plc	**1,494**	2,760	**196**	342
Bank of America Corporation	**30**	447	**-**	-
Wells Fargo	**815**	-	**-**	-
China CITIC Bank International Limited	**188**	87	**-**	-
Skandinaviska Enskilda Banken AB	**98**	500	**-**	-
	2,625	3,794	**196**	342

38 Financial instruments (continued)

The credit risk related to cash and cash equivalents is considered to be low due to the banks being large with high credit ratings.

Credit risk is primarily related to trade receivables. The Group's businesses are concentrated on long-term relationships with a small number of larger and long-established original equipment manufacturers. Overdue receivables are regularly monitored and appropriate action is taken to collect payment. The Group has historically incurred only low levels of unrecoverable receivables. Therefore credit risk is considered to be low.

The Company has no trade receivables.

Trade receivables included the following amounts for the Group's largest customers:

	Group	
	2019 £000	2018 £000
Customer one	**830**	1,541
Customer two	**786**	1,337
Customer three	**468**	1,080
Other customers	**335**	1,778
	2,419	5,736

The age of trade receivables that have not been provided for was as follows:

	Group	
	2019 £000	2018 £000
Not past due	**2,251**	5,726
Past due less than three months	**122**	2
Past due more than three months	**46**	8
	2,419	5,736

No trade receivables have been provided for in either FY2019 or FY2018.

Interest rate risk

Cash is generally held on short-term bank deposits which earns interest at variable money market deposit rates. At 31 May 2019, there was £nil held on short-term deposit. The remaining cash in the Group is held in very low interest rate accounts. Sterling interest rates are very low and therefore interest rate risk is considered to be low.

The interest rate sensitivity of the expected annual interest income/(costs) assuming a balance on deposit or loan of £1,000,000 is as follows:

	Expected annual interest income £000	Expected annual interest costs £000
1.5%	**15**	(15)
1.0%	**10**	(10)
0.5%	**5**	(5)

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38 Financial instruments (continued)

Foreign currency risk

The Group's and Company's reporting currency is sterling, which is also the Company's functional currency. The functional currencies of the subsidiaries are sterling, US dollar, Chinese yuan and Swedish krona.

The Group's results and financial position are affected by fluctuations in foreign currency exchange rates.

The Group has generated a surplus of US dollars during the year due to an increasing number of projects being supplied in US dollars. Whilst the Group's major supplier invoices in US dollars, giving some degree of a natural hedge, it is not adequate to offset the exposure on currency risk. Therefore, the Group has used forward foreign exchange contracts to reduce the currency risk from surplus US dollars. The nature of the Group's businesses means there is limited visibility of the currency required in US dollars. Therefore, when forward contracts are used to reduce currency risk, they are usually only for short periods of no more than six months. If the US dollar were to weaken significantly, this could materially reduce the Group's revenue and operating profit.

Cash is mainly held in sterling and the US dollar.

The Group's exposure to foreign currency risk for cash and cash equivalents, trade receivables and trade payables was as follows:

	Group							
	2019				2018			
	SEK £000	EUR £000	RMB £000	USD £000	SEK £000	EUR £000	RMB £000	USD £000
Cash and cash equivalents	98	-	188	1,635	505	8	87	1,823
Trade receivables	-	-	-	1,589	-	-	568	3,833
Trade payables	-	(175)	-	(667)	(35)	(222)	(524)	(2,299)
Net exposure	98	(175)	188	2,557	470	(214)	131	3,357

The sensitivity of the Group operating profit to the US dollar to sterling exchange rate, assuming all other variables remain constant, is as follows:

If the US dollar had been 1% stronger/weaker against sterling throughout the year ended 31 May 2019, then the Group operating profit would have been £33,000 higher/lower.

Capital management

The Group's and Company's capital is the total equity which comprises ordinary share capital and retained earnings.

The Group currently has a sales invoice financing agreement in place for £3.0m in the UK and has recently entered into an agreement for a sales invoice factoring agreement in the USA for $4.0m. At 31 May 2019, the Group had net cash of £2.5m and the Company had a cash balance of £0.2m. The Group and Company have sufficient cash to cover working capital requirements and capital expenditure plans.

The Group's objective when managing capital is to safeguard the Group's ability to continue as a going concern in order to provide future returns for shareholders.

39 Forward-looking statements

Certain statements in this Annual Report are forward-looking. Where the Annual Report includes forward-looking statements, these are made by the directors in good faith based on the information available to them at the time of their approval of this report. Such statements are based on current expectations and are subject to a number of risks and uncertainties, including both economic and business risk factors that could cause actual events or results to differ materially from any expected future events or results referred to in these forward-looking statements. Unless otherwise required by applicable law, regulation or accounting standard, the Group undertakes no obligation to update any forward-looking statements whether as a result of new information, future events or otherwise.

Shareholder information

Directors
(All at Filtronic House, 3 Airport West,
Lancaster Way, Yeadon, Leeds,
West Yorkshire, LS19 7ZA, UK)

Michael Tyerman - Finance Director

Reg Gott - Executive Chairman

Michael Roller - Non-Executive Director

Pete Magowan - Non-Executive Director

Company Secretary
Maura Moynihan

Company number
2891064

Registered office
Filtronic plc
Filtronic House
3 Airport West
Lancaster Way
Yeadon, Leeds
West Yorkshire
LS19 7ZA
Tel: 0113 220 0000

Auditor
PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
Central South Square
Orchard Street
Newcastle upon Tyne
NE1 3AZ

Bankers
Barclays Bank plc
10 Market Street
Bradford
BD1 1NR

Financial public relations
Walbrook PR Limited
4 Lombard Street
London
EC3V 9HD
Tel: 020 7933 8780

Annual General Meeting
The Company's Annual General Meeting will be held at 11am on 27 November 2019 at the offices of Pinsent Masons LLP, 1 Park Row, Leeds LS1 5AB.

Registrars
Link Asset Services
Enquiries regarding shareholdings, change of address or similar particulars should be directed in the first instance to our Registrars, Link Asset Services whose address is: The Registry, 34 Beckenham Road, Beckenham, Kent BR3 4TU, or call 0871 664 0300 (UK calls cost 10p per minute plus network extras). From overseas: +44 371 664 0300. Lines are open 9.00am to 5.30pm, Monday to Friday, excluding public holidays. Alternatively, you can email: shareholderenquiries@linkgroup.co.uk.

Filtronic website
Shareholders are encouraged to visit our website (www.filtronic.com) which has more information about the Company.

Filtronic

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