



# Filtronic

**Filtronic plc**

Annual Report and Accounts 2018

Stock Code: FTC

[www.filtronic.com](http://www.filtronic.com)

# Welcome to Filtronic



Filtronic plc is a designer and manufacturer of advanced RF communications products supplying leading Original Equipment Manufacturers and Mobile Network Operators in the mobile telecommunications infrastructure and critical communications markets.

Our objective is to grow profitably in our chosen market by being a key supplier to our customers of technically advanced products. 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.

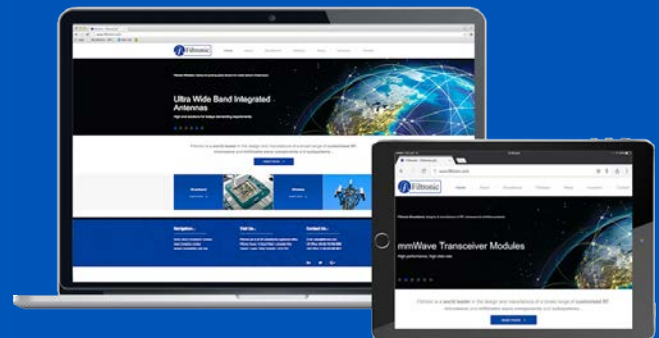
Our strategy to fulfil this objective is:

- To offer a growing range of technically advanced antennas, mmWave transceivers and filters which are designed to meet the specific needs of our customers;
- To expand our customer base within existing markets; and
- To widen the number of markets we serve (both established and emerging markets).

In an increasingly connected world where data is consumed in vast quantities, Mobile Network Operators (MNOs) are adding capacity to provide consumers with high-speed, high-capacity services that enable them to enjoy premium quality data services, such as streaming video, wherever they are.

MNOs are adding capacity to existing 4G networks by licensing more spectrum, densifying existing cells, and by adopting new technologies that will also be essential to the development of 5G networks, such as Massive MIMO, that make more efficient use of existing spectrum.

Filtronic provides key technologies that are at the heart of densification and the development of



higher capacity 4G and 5G networks. Our products include multi-band, multi-port antennas, Massive MIMO antennas and ultra-high capacity mmWave transceivers that are used to wirelessly connect base stations together.

Filtronic also provides a range of RF conditioning products to public safety networks that are used by first responders. These networks provide critical communications and require high reliability equipment to demanding specifications.

Technically advanced high-frequency RF communications equipment will be essential to the development of future 5G systems, and with network access and mmWave know-how we are well placed to play a key role as these networks are developed.

Filtronic is also working on long-range, high-capacity wireless data links that will play a key role in the development of High Altitude Pseudo-Satellite communications networks. These networks are being developed to overcome the limitations of terrestrial networks and bring the benefits of broadband internet to an ever wider audience.



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We continue to be encouraged by the breadth of opportunities being developed and remain optimistic for the long-term prospects for the Group.

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We were very pleased to see a strengthening of demand for higher margin products in the year, which led to improved profitability.

### 09 Market review

5G represents a major opportunity with its mixture of sub-6GHz and mmWave frequencies as we have significant know-how over the proposed frequency ranges and the channels to market to capitalise on the opportunity.

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5G is the future of communications networks, and operators are beginning to develop plans for its deployment alongside partners, such as Filtronic, who are capable of delivering the required technology and quality.

# Glossary

<b>3GPP:</b>	The 3rd Generation Partnership Project
<b>4G:</b>	4th Generation mobile networks
<b>5G:</b>	5th Generation mobile networks
<b>CAGR:</b>	Compound Average Growth Rate
<b>E-band:</b>	71GHz to 86GHz
<b>EBITDA:</b>	Earnings Before Interest, Taxation, Depreciation and Amortisation
<b>EMEA:</b>	Europe, the Middle East and Africa
<b>ExaByte</b>	One quintillion bytes
<b>FDD:</b>	Frequency Division Duplex: a telecommunications duplex indexing method
<b>GHz:</b>	Gigahertz: $10^9$ Hertz
<b>Gigabit:</b>	$10^9$ bits
<b>HAPS:</b>	High Altitude Pseudo-Satellites
<b>IoT:</b>	Internet of Things
<b>IP:</b>	Intellectual Property
<b>LAA:</b>	Licensed Assisted Access
<b>LBITDA:</b>	Loss Before Interest, Taxation, Depreciation and Amortisation
<b>LEO:</b>	Low Earth Orbit
<b>LTE:</b>	Long-Term Evolution
<b>MHz:</b>	Megahertz: $10^6$ Hertz
<b>MIMO:</b>	Multiple-Input, Multiple-Output
<b>mMIMO:</b>	Massive Multiple-Input, Multiple-Output
<b>mmWave:</b>	Millimetre Wave
<b>MNO:</b>	Mobile Network Operator
<b>Mobile PC:</b>	Defined as laptop or desktop PC devices with built-in cellular modem or external USB dongle
<b>Mobile router:</b>	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)
<b>ODU:</b>	Outdoor Unit
<b>OEM:</b>	Original Equipment Manufacturer
<b>P25:</b>	Project 25: a suite of standards for digital mobile radio communications designed for use by public safety organisations in North America
<b>RET:</b>	Remote Electrical Tilt
<b>RF:</b>	Radio Frequency: a rate of oscillation in the range of around 3kHz to 300GHz
<b>Smartphone:</b>	Mobile phones with data processing capabilities, e.g. iPhones, Android OS phones, Windows phones but also Symbian and Blackberry OS
<b>TDD:</b>	Time Division Duplex: duplex communication links where uplink is separated from downlink by the allocation of different time slots in the same frequency band.
<b>TRM:</b>	Transmit Receive Module
<b>UWB:</b>	Ultra Wide Band
<b>Wi-Fi:</b>	Technology to enable wireless internet



Pictured: Filtronic antenna test range,  
Täby, Sweden



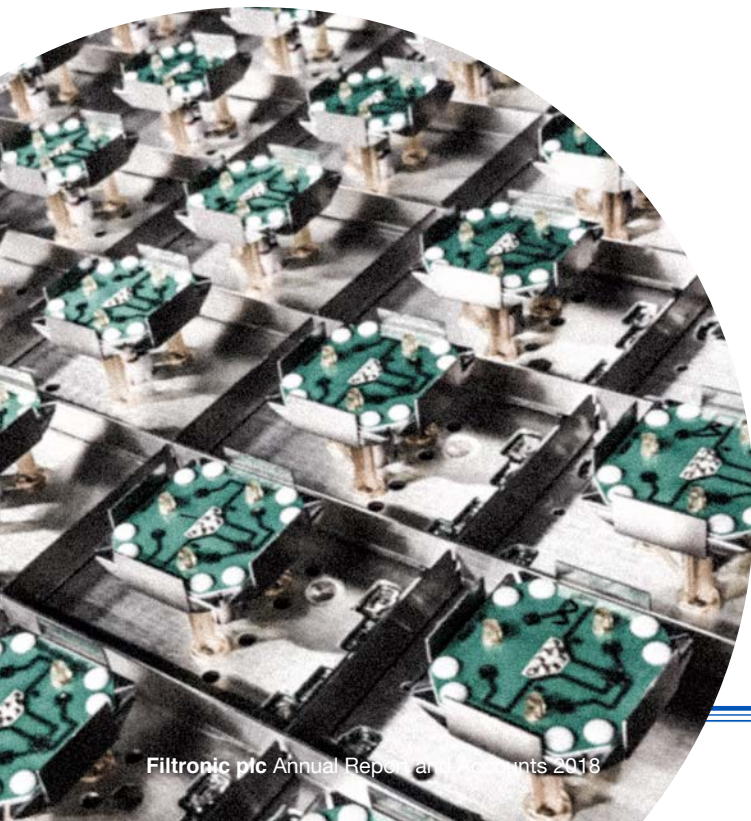
# Strategic report

## Financial highlights

	2018	2017
Sales revenue	<b>£24.0m</b>	£35.4m
Earnings before interest, taxation, depreciation and amortisation	<b>£2.5m</b>	£2.5m
Operating profit	<b>£1.8m</b>	£1.7m
Profit before taxation	<b>£1.2m</b>	£2.2m
Basic earnings per share	<b>0.59p</b>	1.51p
Diluted earnings per share	<b>0.59p</b>	1.49p
Net cash balance at 31 May	<b>£3.6m</b>	£2.6m
Cash inflow from operating activities	<b>£1.8m</b>	£3.9m

## Operational highlights

- Secured a development contract with a major OEM to design and supply Massive MIMO antennas, a key product in network densification using techniques that will form the basis of 5G systems.
- Second major contract win secured in the year for our Tier 1 European defence customer. The contract, valued at £4.8m, is to be supplied over three years. Production rates reached full contractual requirements by the close of the year.
- Another year of strong demand for filter products, with the main growth driven by our customer in public safety, the largest OEM supplier in the public safety communications market.
- Approved as a vendor by a major US mobile network operator to supply 5G Evolution antennas and recently qualified by a major MNO in EMEA for another of our antenna products.
- Selected by a leading OEM to supply Orpheus E-band transceivers into their new E-band backhaul radio.
- Reorganisation of the business to capitalise on opportunities in 5G as we leverage our operational and engineering capabilities.



Pictured: radiating elements used in the Massive MIMO antenna



# Chairman's statement

Dear fellow shareholder,

Welcome to the Filtronic plc Annual Report for the year ended 31 May 2018.

The year under review saw steady progress as we further developed our strategy of broadening our customer base and the markets we serve. Although sales revenue reduced, a good sales mix along with the initial fulfilment of the previously announced defence contracts enabled gross margins to improve, with the result that operating profitability was marginally higher than in the comparative period.

The reduction in sales resulted from a combined impact of lower than expected demand for our customer-specific integrated ultra wide band antennas and delays in the production ramp of our new defence contracts that did not achieve full production capacity until the final quarter of the year. In the second half of the year, we also saw a softening of demand for legacy filter products as some of these programme roll-outs naturally concluded.

We are, however, very pleased with the progress made through the year in developing, refining and executing our strategies to prepare the business for 5G deployment and to increase our participation in markets other than mobile telecommunications infrastructure. We were particularly pleased to announce the award of a development contract for Massive MIMO ("mMIMO") antennas from Nokia. This is strategically significant as mMIMO is a fundamental technique that will be used in the development and deployment of 5G systems. The mMIMO antenna is complex, but we have been able to leverage our prior IP to accelerate the development phase and we anticipate that, having recently received initial orders, production will commence in the first half of FY2019.

## Financial performance summary

Group sales for the year were £24.0m (2017: £35.4m) and an operating profit of £1.8m was achieved (2017: £1.7m). Earnings before interest, taxation, depreciation and amortisation ("EBITDA") was £2.5m (2017: £2.5m).

Filtronic Wireless business revenue was £18.4m (2017: £30.5m) with an operating profit of £2.4m (2017: £3.5m) and EBITDA of £2.7m (2017: £4.0m).

Filtronic Broadband business revenue was £5.6m (2017: £4.9m) with an operating profit of £0.2m (2017: £0.9m operating loss) and EBITDA of £0.5m (2017: £0.6m loss before interest, taxation, depreciation and amortisation ("LBITDA")).

The Group had net cash of £3.6m at the end of the financial year (2017: £2.6m). The cash generation for the year reflected the continuing profitability of the Group. The Group maintains an invoice discounting facility in the UK with Barclays Bank plc of £3.0m that was undrawn at the year end (2017: £nil). We have recently secured a further financing agreement with Wells Fargo Bank for an invoice factoring facility in the USA of \$4.0m. This facility will support our sales growth in the US market.



## Dividend

No dividend is proposed for the year (2017: £nil). The Board continues to review its dividend policy and remains of the opinion that, whilst cash reserves remain healthy, shareholder interests are better served by retaining cash to fund our working capital and further investment plans than by distributing cash at this time.

## Outlook

The progress made over the past few years has demonstrated the Group's ability to grow both profits and profitability. Whilst progress has been made in diversifying our customer base, our sales remain highly concentrated and are still exposed to fluctuations in demand due to the nature of our business and the significant size of projects we supply. However, the shorter product life cycles associated with the mobile telecommunications infrastructure market are being offset by the revenues that we are now starting to generate from the critical communications market which has a longer-term demand profile and more predictable revenue streams.

As the technologies deployed within our Filtronic Wireless and Filtronic Broadband products progressively converge, we have concluded that merging our two engineering and operations organisations and trading as one business will better optimise the use of our resources for the benefit of both customers and shareholders. Consequently, this is the last year that we will report Filtronic Wireless and Filtronic Broadband within the Group as two separate business segments.

We continue to be encouraged by the breadth of opportunities being developed and remain optimistic for the long-term prospects for the Group.

The terms and impact of Brexit remain unclear, but the global nature of our trade should provide a good degree of shelter from any major changes that may arise when the UK leaves the European Union.

I would like to thank our employees for all their continued hard work over the past year and to also thank our shareholders and other stakeholders for their continuing support as we work to build the business.

Reg Gott  
Chairman  
15 August 2018

## Chief Executive's review

FY2018 saw good underlying profitability despite reduced sales revenue compared to FY2017. The decline in sales revenue was a consequence of a faster than expected reduction in demand for ultra wide band integrated antennas as the programme roll-out that saw such good demand in FY2017 concluded. Whilst a year-on-year drop in sales revenue is disappointing, we were very pleased to see a strengthening of demand for higher margin products in the year, which led to improved profitability. With good order visibility on established programme roll-outs from defence contracts and our selection by a major Original Equipment Manufacturer ("OEM") to supply Filtronic-designed mMIMO antennas, we are confident for the business over the mid to long term.

### Our strategy and markets

Our objective is to grow profitably as an organisation by being a key supplier of advanced RF communications products to the mobile telecommunications infrastructure and critical communications markets. We focus on growth markets, where we have a deep understanding of the sector and customer requirements and where we can leverage our know-how and significant IP portfolio.

Our strategy to fulfil this objective is:

- To offer a growing range of technically advanced antennas, mmWave transceivers and filters which are developed to meet the specific needs of our customers;
- To expand our customer base within existing markets; and
- To widen the number of markets we serve.

We have made significant progress in broadening both our customer base and the markets we serve and FY2018 saw



major contributions to sales and profits from outside our traditional mobile telecommunications infrastructure market. Revenues and profits from customers in the defence and aerospace and public safety networks markets grew strongly in the year, providing a good platform for the future.

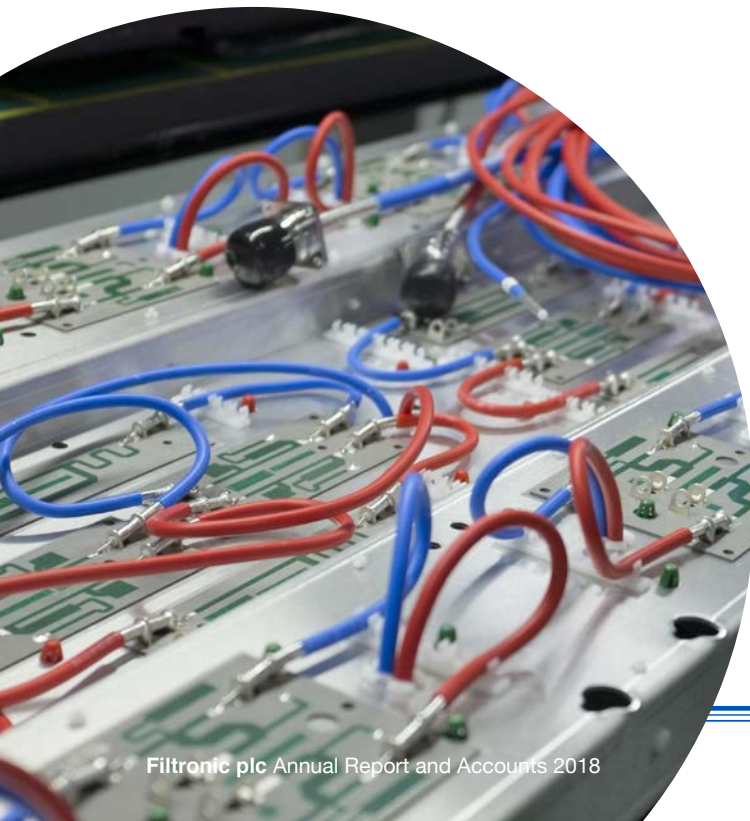
Our core technology know-how is in antenna, RF conditioning and transceiver products. We have gained a strong and growing reputation in the markets we serve for innovation, flexibility and the ability to deliver technically advanced products to demanding specifications. The fast-moving nature of the markets we serve means that we have to be flexible and adapt rapidly to changes.

Within our traditional telecommunications market, the evolution to 5G has begun to shape the nature of customer demand. The recently announced orders for mMIMO antennas is one example of how Filtronic is participating in this technology evolution. As 5G develops to use mmWave bands, our know-how in high-frequency transceivers, filtering and antennas becomes increasingly relevant to our customers.

Over recent years, the technologies deployed across our two businesses have been on progressively converging pathways. We have therefore concluded that merging our two business units into a single operating structure will enable us to better address the opportunities that 5G is presenting to us and allow the organisation to better utilise its engineering, operations and sales resources. This change will also enable us to simplify our messaging to new and existing customers as we will simply go to market as Filtronic, eliminating some confusion that existed whilst trading as two separate business units.

The mobile telecoms infrastructure market has been the main focus for Filtronic for a number of years. However, as we execute our strategy to grow our customer base and target adjacent market opportunities, we must ensure our sales organisation reflects the different drivers and characteristics of these target markets. We have therefore also realigned our sales force into two sales teams to give specific market focus

Pictured: Antenna phasing network





to our selling activities. One team will focus on our core mobile telecommunications infrastructure market whilst the other will focus on the critical communications market, which includes defence and aerospace, public safety and emerging applications such as High Altitude Pseudo-Satellites (“HAPS”). We are convinced that having sector specialists will enable us to meet our customers’ needs and expectations more closely

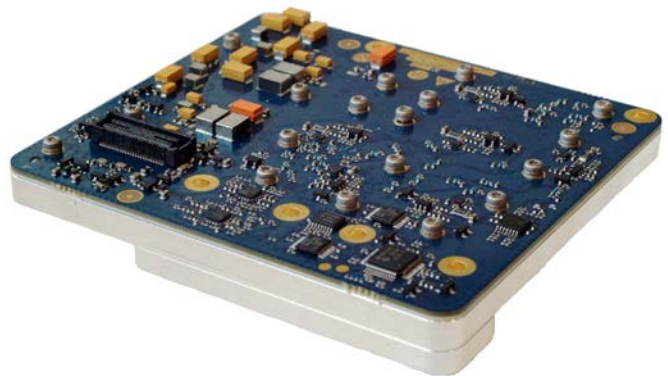
As a consequence, from the start of the new financial year, Filtronic Wireless and Filtronic Broadband business segments have been combined, and this review will be the last one that references the previous operating segments and reports discrete financials for each.

### Filtronic Wireless

FY2018 saw a reduction in revenues compared with FY2017 due to the faster than expected reduction in demand for our first generation of custom-integrated antenna. However, based upon our achievements with this product, we secured a major follow-up product development contract for a mMIMO antenna. This antenna is currently undergoing end customer trials with an expected production ramp in FY2019. We are pleased to note that initial orders have now been received and we are in the process of setting up production lines to meet this demand.

We have made considerable efforts to sell antennas direct to Mobile Network Operators (“MNOs”) to further diversify our customer base. Establishing ourselves in this sub-set of the market has, however, taken longer than we had originally expected. During FY2018, one of our antenna products was approved by a major US MNO and we are pleased to report that another MNO in EMEA recently qualified another of our antenna products. We are working diligently to convert these product approvals into sales and will keep investors informed of progress.

In FY2017, we saw good demand for legacy filter products and this demand continued through the first half of FY2018. However, we started to see this demand tailing off in the second half of FY2018 and we expect to see further reductions as the programmes for these filter products conclude during FY2019. We took a conscious decision to exit the OEM base station filter market in FY2016 as this market had become increasingly commoditised by a number of Chinese suppliers bidding aggressively to secure business. This trend has continued, and we have no intention of re-entering this space. However, we do continue to sell filters into the public safety market along with our advanced antennas, which are system-level products with integrated filters. In addition, we sell complex filter combiners to MNOs where the application has not been commoditised.



Pictured: Orpheus transceiver

FY2018 saw very healthy demand for filters and combiners from the public safety market. This demand is project-driven and during FY2018 we benefited from several major new system deployments. Whilst demand is uneven, product life cycles are long and underlying demand has steadily increased in recent years.

### Filtronic Broadband

During FY2018, we saw production ramps for the two main defence contracts we had previously announced, which require Filtronic to build high-specification Transmit Receive Modules (“TRMs”) to our customers’ specifications. Our know-how in the manufacture of transceivers, along with our specialised production capability, was key to winning these contracts. The component materials used are specified and, for the most part, procured by the customer and then “free issued” to us for manufacture, assembly and testing. The scale-up of production proved to be challenging due to third-party supply issues with some of these components, and this significantly delayed achieving the anticipated revenues. However, by working closely with our customer, we were able to identify solutions to these component issues and by the final quarter of FY2018, the two contracts were at full contractual production rates. These two initial contracts run for three and eight years, respectively. We note that more orders have been placed for the defence application where these TRMs are embedded and we are thus well positioned to win more work in due course.

After a slow start to the year for sales of our backhaul Orpheus transceiver products, we are pleased to report that Orpheus sales picked up in the second half as a leading OEM adopted this transceiver and embedded it in their new E-band backhaul radio. We continue to seek opportunities for these products in other applications and are working on developing new design variants and configurations that meet the specification requirements and price points demanded by the telecoms market.

## Chief Executive's review continued

In addition to our focus on our traditional core markets, we are working to develop opportunities for our mmWave transceiver products in emerging applications such as high-capacity communications links to satellites, HAPS and track-side to train links. During FY2018, we also secured and delivered development contracts for fibre replacement and 5G-related test equipment applications.

We are pleased with our progress in growing our customer base and reducing our customer concentration but recognise that we sell our products to a small number of large clients and so addressing this concentration issue remains a long-term project.

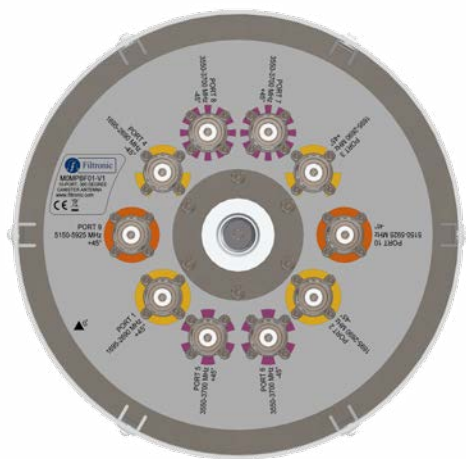
### Future trends

The markets that we serve are dynamic, growing and continue to present good opportunities for us.

MNOs continue to invest in networks to increase capacity. Within 4G LTE networks, MNOs are increasing capacity by densification of their networks. There are two specific trends in densification:

- a) MNOs acquiring additional spectrum and building out networks to deploy additional bands. This is resulting in a requirement for multi-band antennas that can service as many as six different frequency bands.
- b) The introduction of mMIMO increases spectral efficiency within existing licensed bands. This technique is a cost-effective way for MNOs to increase capacity and reduces the significant investment in additional spectrum.

These dense networks, primarily at frequencies less than 6GHz, are being marketed as 4.5G, 4.9G and 5G Evolution by MNOs and this is where we expect to see the majority of hardware investment over the next few years. Filtronic is well positioned to participate in the densification of 4G LTE networks with our multi-port, ultra wide band antennas and our mMIMO antenna offering.



Pictured: 10-Port, LAA, Quasi-Omni Antenna

We are also starting to see investment in the development of mmWave 5G technologies. In the 26–28GHz band, concept models have been produced with fully integrated front ends where the mMIMO antennas are closely coupled to dedicated chipsets incorporating multiple TRMs.

We are very well placed to participate in the development of these 5G systems. Our combination of key relationships with OEMs, high-frequency transceiver and TRM expertise, and knowledge of advanced antenna and filtering technologies provides us with solid commercial and technical platforms upon which we can build our market position.

The critical communications market is driven by government and quasi-governmental spending. Geopolitical instability is leading to renewed expenditure on more advanced defence and public security equipment and technology.

Investment in public safety networks continues to grow and effective communications networks for emergency services are seen as a high priority in an era of increasing focus on national security. Whilst longer term there is a desire to use commercially available broadband networks, such as 4G LTE, that can accommodate public safety data requirements, most budget holders value the quality, operational independence, performance and stability of narrowband public safety systems such as P25 and Tetra.

### Looking ahead

The future of RF communication continues to be exciting and Filtronic's relevance to its customers and markets continues to grow. We are supplying products and technologies to leading businesses in mobile telecommunications infrastructure and critical communications markets that will see major deployments in the coming years. We continue to develop relationships with existing and new customers that will yield long-term growth for the business.

Rob Smith  
Chief Executive Officer  
15 August 2018



# Market review

Filtronic supplies advanced RF communications equipment to the mobile telecommunications network infrastructure and critical communications markets.

Our core market has historically been the mobile telecoms OEM sector. Over the last ten years, this market has experienced substantial consolidation of the addressable customer base and the emergence of Chinese competitors who have driven a price-down strategy. As a consequence, our sales became concentrated on a decreasing number of clients. Our strategic response has been to focus on more advanced technologies and products, to expand our customer base by building sales to MNOs, and to further develop our established position in the growing critical communications markets, whilst creating participation opportunities in new, advanced, communications strategies being explored by some of the world’s largest technology companies where Filtronic’s advanced capabilities, agility and reputation for innovation is valued.

## Mobile telecommunications

The mobile telecommunications network infrastructure market will continue to be of major significance to Filtronic and we supply a range of products to this market. In recent years, we have concentrated on system-level and sub-system-level products where we are able to differentiate our capabilities.

Growth within this market has been driven by ever increasing user demand for high-quality data networks, with streaming of video through apps such as YouTube, Netflix and the BBC iPlayer driving the need for capacity and high data rates. The graphs in this section of the Annual Report demonstrate how this translates into data usage with substantial growth forecast over the next five years.

MNOs have sought to expand capacity in 4G LTE networks and have added spectrum, creating the need for ultra wide band equipment. In addition, mMIMO antennas use existing spectrum more efficiently, enabling capacity gains within previously licensed spectrum. This densification of the 4G

LTE network is a major drive for MNOs and we see this trend continuing over the near to medium term.

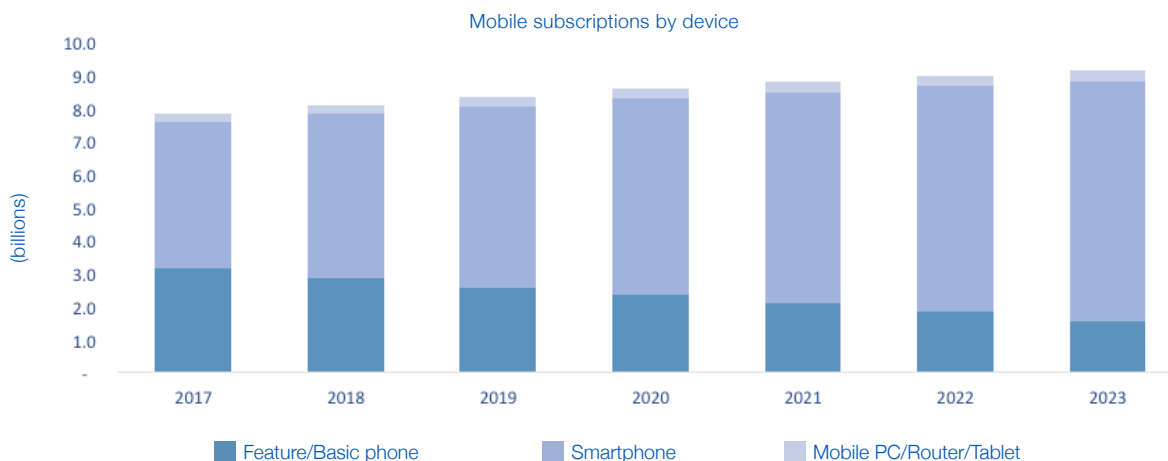
The introduction of 5G future networks is beginning to take shape. In July 2018, 3GPP officially released the network architecture standards that will be used in 5G. These standards are frequency agnostic and it is envisaged that traditional sub-6GHz bands as well as higher frequency mmWave bands will be deployed. The industry sees bands around 3.5GHz as of particular interest because this frequency offers potential capacity and data rate gains within the established sub-6GHz range. The effective range of radio frequency communications at 3.5GHz is relatively short, meaning that many more cell sites will be required for operations at this frequency.

To achieve the capacity and data rates envisaged for use in 5G networks, techniques such as 3D beamforming will need to be deployed. mMIMO is a key enabler of this technology, making it a strategically important product. The integration of radio, software and antenna technologies will be key to delivering these capabilities, and relationships with OEMs will be essential in the development of antennas for 5G networks.

We are well placed to participate in the densification of 4G LTE networks with our range of ultra wide band antennas and mMIMO. 5G represents a major opportunity with its mixture of sub-6GHz and mmWave frequencies as we have significant know-how over the proposed frequency ranges and the channels to market to capitalise on the opportunity.

## Critical communications

Critical communications markets cover those sectors where highly reliable RF equipment is mission critical. This category includes defence and aerospace applications (including advanced communications and radar), public safety communications networks and emerging markets such as HAPS and Low Earth Orbit (“LEO”) communications networks.



Source: Ericsson mobility report November 2017

## Market review continued

The defence and aerospace markets provide a diverse range of opportunities and with NATO members starting to increase spending in advanced systems, we are looking to build on our recent contract wins in this sector.

Public safety networks continue to receive good levels of investment as government and quasi-governmental agencies continue to expand existing networks.

Security concerns are a major issue in defence and aerospace and public safety markets and consequently many governments have a policy of buying only from security-vetted suppliers. These markets also have longer product life cycles and provide more visibility of revenues, giving the business a more predictable platform from which to grow.

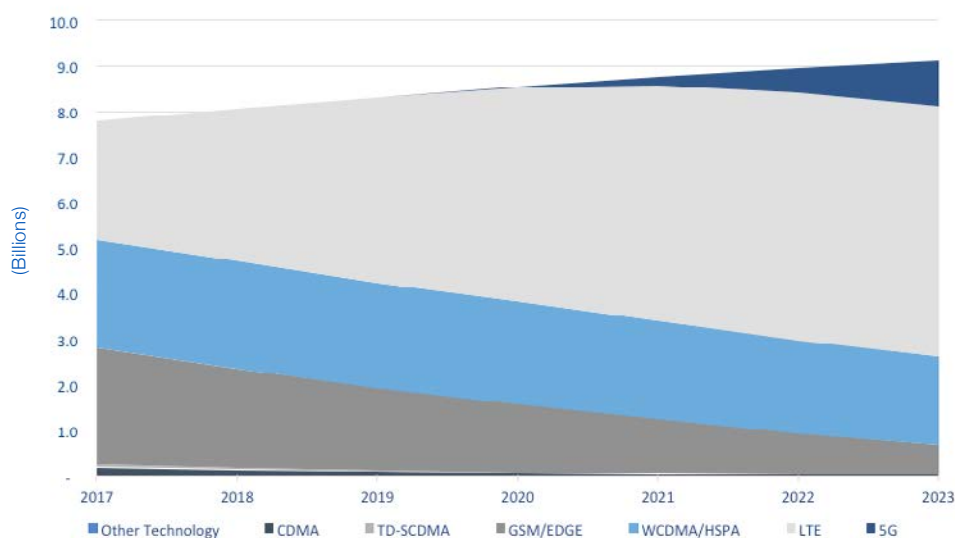
HAPS and LEO networks are in the early stages of

development as a number of technology firms look to expand internet coverage to include geographic locations that do not have adequate traditional installed network broadband service. We have participated in development projects in this sector and our knowledge of high-capacity, long-range transceivers is highly relevant to this market.

### Market strategy

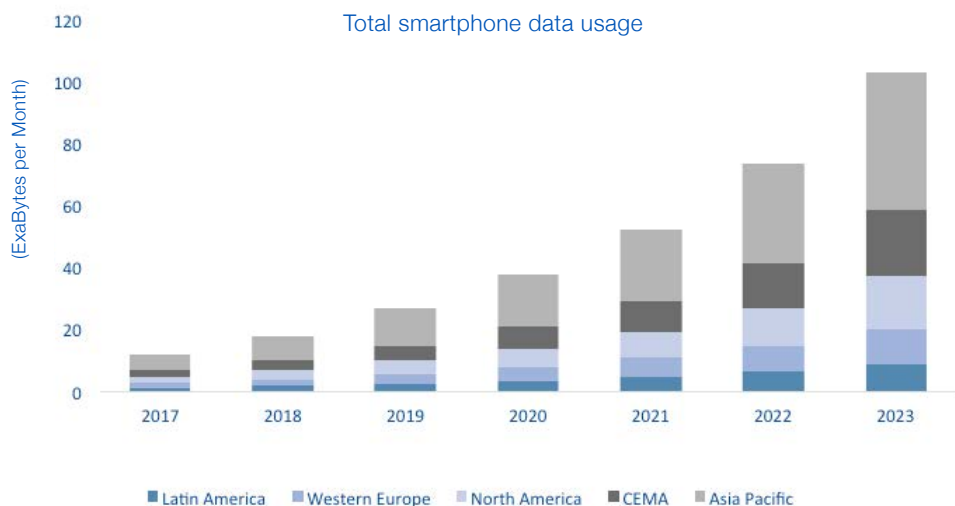
Our strategy is to focus on the markets that we have identified where our IP and know-how differentiate us and where we have established a good understanding of the market requirements. We have separate sales teams that concentrate on the markets we have identified to ensure that we align our channels, strategies and focus to market specific needs and opportunities.

Mobile subscriptions by technology



Source: Ericsson mobility report November 2017

Total smartphone data usage



Source: Ericsson mobility report November 2017



# Objective and strategy

Filtronic is a leading designer and manufacturer of RF communications components and sub-systems.

Our objective is to profitably grow our business by supplying class-leading RF communications components and sub-systems for demanding applications across our target markets. Our strategy to deliver this objective is:

- To offer a growing range of technically advanced antennas, filters, mmWave transceivers and associated products;
- To expand our customer base within our target markets; and
- To widen the number of markets that we address.

## Product strategy

Our high-performance product range has been developed using advanced design capabilities and currently comprises antenna, filter and mmWave transceiver products.

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

### Antenna products

Filtronic currently offers a range of standard ultra wide band antennas covering both USA and the rest of the world bands. In addition, we work closely with customers to tailor 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 network needs.

### mmWave transceiver products

Filtronic's mmWave transceiver products are based around

our class-leading, high-capacity, E-band transceiver technology which is used in mobile backhaul and wireless link applications.

## Organisational overview

Filtronic has merged its two operating business units, Filtronic Broadband and Filtronic Wireless, into a single operating unit which will be reported from the start of the new financial year. This change has been made to:

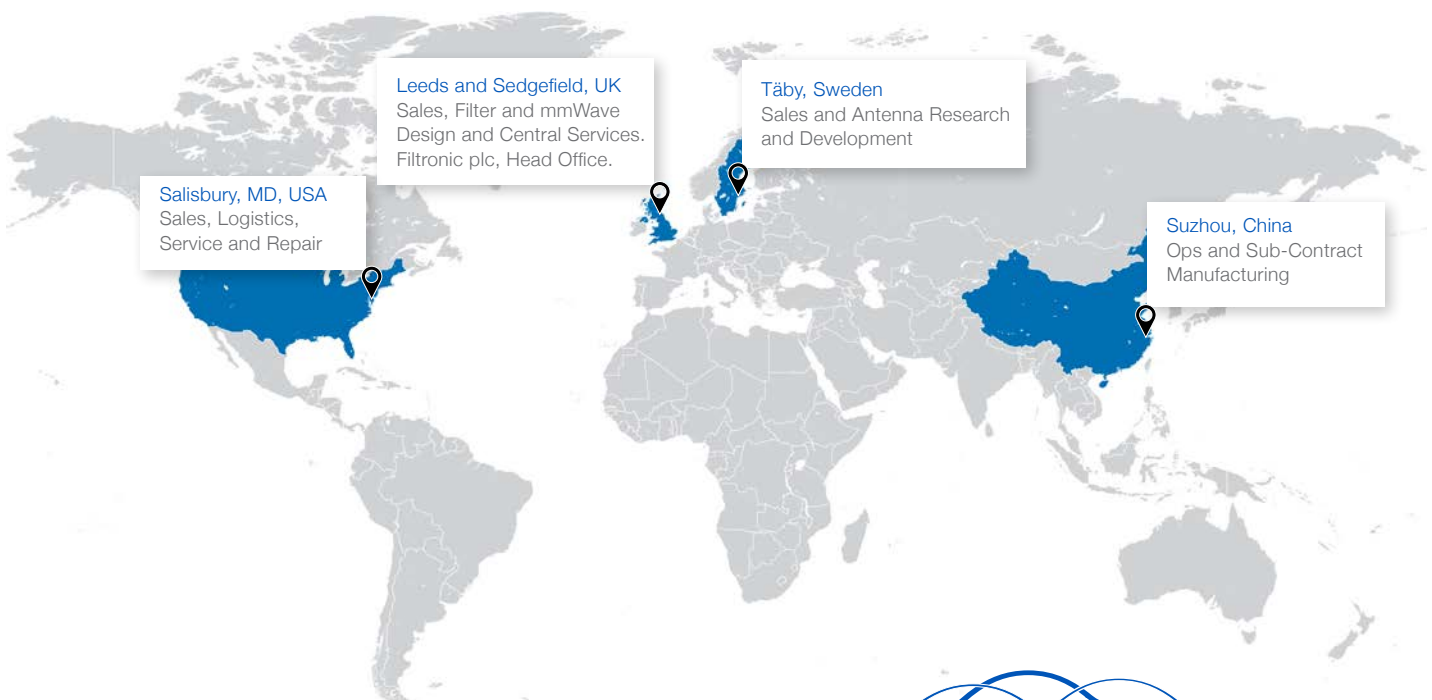
- Better align ourselves to the opportunities presented by 5G: as higher frequency networks are developed, the technologies we offer converge;
- Simplify the branding by focusing on the Filtronic name;
- Improve operating efficiencies by merging the two business units; and
- Leverage the talent pool across the business.

Filtronic operates from strategically located sites in the UK, Sweden, the USA and China, so that we are close to our customer and supply base.

Our business ethos is to be agile and responsive to customer needs 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 minerals. Details of our policies may be found on our website at:

[www.filtronic.com/investors/corporate-governance/group-policies/](http://www.filtronic.com/investors/corporate-governance/group-policies/).



## Objective and strategy continued

### Filtronic people

At Filtronic we firmly believe that it is our people who make the difference. We have an experienced, highly qualified and motivated team who are determined to deliver 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. The antenna team has extensive industry expertise extending back to 1994, whilst the filter team has expertise dating back to 1992, including unique expertise, know-how and design reputation in electronically reconfigurable filters.

With key staff positioned globally, Filtronic is able to design and develop its product portfolio with an excellent understanding of end customer and market needs.

### Manufacturing and fulfilment

Design and development is performed and managed in-house at our advanced design centres in Leeds, Täby and Sedgefield.

Antenna and filter manufacturing is outsourced to our manufacturing partner in Suzhou, China, whom we have worked with for over ten years.

mmWave transceiver products are manufactured at our highly automated facility in Sedgefield, UK.

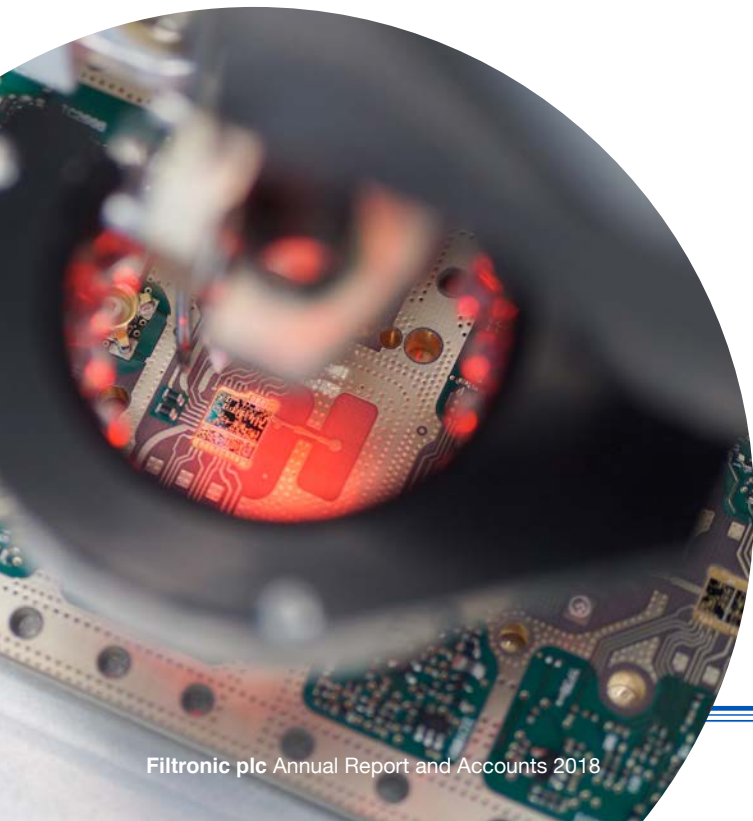
Our logistics and service and repair centre based in Salisbury, Maryland, USA, provides customer service and support to markets in North America.

### 5G future networks

#### Next-generation technology: “Pre-5G” in the near term

5G is the future of communications networks, and operators are beginning to develop plans for its deployment alongside partners, such as Filtronic, who are capable of delivering the required technology and quality.

- OEMs and operators are starting to plan for 5G implementation.
- Other than some “genuine” 5G trials being undertaken, most press releases labelled as 5G are essentially enhanced 4G with some of the necessary 5G techniques partially implemented, for example:
  - Huawei “4.5G”;
  - Nokia “4.5GPro and 4.9G”; and
  - ZTE and Ericsson “Pre-5G”.
- Recently AT&T launched its “5G Evolution” plans leveraging LAA frequencies.
- The cornerstone of 5G is mMIMO/3D beamforming, and some systems have been, or are being, deployed which utilise 8x8 mMIMO.
- Some systems using unpaired spectrum/TDD mode only using a single frequency band were deployed in 2016.
- 8x8 mMIMO solutions using FDD (paired spectrum) are currently under development by the OEMs with some trial systems deployed in late 2017. Extensive roll-out in early adoption markets is expected in 2019.
- Initial focus is on high-frequency bands >1.7GHz where physical size is acceptable.
- Standard panel antennas will continue to dominate at <1GHz due to physical size and gain trade-offs.



Pictured: Automatic wire bonder



### Next-generation technology: True 5G in the long-term

Based on our enviable combination of experience, product portfolio and reputation, Filtronic is ready to take advantage of the move to 5G as a trusted implementation partner.

- Whilst there is still not a fully released 3GPP specification, all OEMs have now released trial hardware and are committed to true 5G trials.
- There has been some narrowing of the frequency band likely to be used going forward and it is clear that true 5G will be at frequencies over 28GHz. This is where most of the trials are being undertaken (Verizon, NTT DOCOMO, KT, SK Telecom, AT&T).
- In the USA, in 2017, Verizon won a bidding war with AT&T to acquire Straight Path for \$3.1bn (39GHz for 95% of issued licenses and 28GHz in some major cities).
- 3GPP have now named 5G as “5G NR” – (5G New Radio) with a full specification to be released at Release 15.
- Pre-commercialisation trials have mostly been at 28GHz based on broadband delivery systems only.
- All trial systems use 8x8 mMIMO technology.
- Large technology companies are investing heavily to ensure they do not miss the boat.
- Large-scale adoption will coincide with a burgeoning IoT market.

### Case studies

#### Massive MIMO

Filtronic has collaborated with a major OEM to develop a mMIMO antenna.

#### OEM mMIMO antenna

- The next-generation, dual-band FDD LTE antenna is designed to integrate the OEM's radios in a 16T16R configuration and is based on Filtronic proprietary designs, allowing rapid product development.
- Massive MIMO incorporates beamforming techniques that yield increased spectral efficiency, which significantly increases network capacity in both uplink and downlink.
- The efficiency gains from Massive MIMO products provide a compelling business case for MNOs and are a major step in the development of dense 5G networks.



Pictured: mMIMO antenna

#### What is Massive MIMO?

The acronym MIMO stands for Multiple-Input, Multiple-Output. It is a term that is used to describe the ability of a wireless network to transmit and receive more than one data signal at the same time using the same data radio channel.

Standard MIMO networks tend to use two or four antennas that are physically separate but used in combination to form part of the network. Massive MIMO, is a MIMO system with an especially high number of antenna elements. In this instance, it is desirable for the antennas to be housed in a single unit and such a dense array of elements is referred to as a Massive MIMO antenna.

There is no set figure for what constitutes a Massive MIMO array, but the description tends to be applied to systems with tens or even hundreds of antenna elements. From a performance perspective, the higher the number of antenna elements, the better the network performance. So, an 8x8 Massive MIMO antenna has 64 separate antenna elements.

Because of practical considerations, for example, space on masts, wind loads and weight, Massive MIMO antennas are usually constrained to use higher frequencies that have shorter wavelengths and therefore physically smaller antennas.

## Objective and strategy continued

### What are the advantages of Massive MIMO?

By arranging elements in a grid pattern, it is possible to use a technique known as 3D beamforming. Beamforming enables a radio signal to be focused at a single point rather than across the full sector covered by an antenna. Therefore, the advantage of a Massive MIMO network over a conventional one is that it can multiply the capacity of a wireless connection without requiring more spectrum. There are numerous factors involved but some estimate that Massive MIMO could potentially yield as much as a 50-fold capacity increase eventually. In a world where spectrum licences cost in the hundreds of millions of dollars, if not billions, this kind of increase in capacity is highly attractive to MNOs and justifies the infrastructure investment necessary to deliver Massive MIMO.

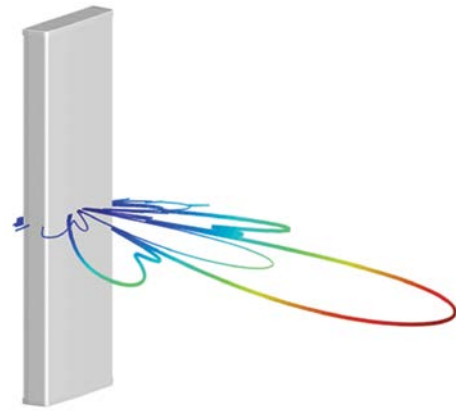
The spectral efficiency of Massive MIMO means that spectrum is not wasted and that networks are more efficiently deployed. This densification of the network is critical as capacity in 4G networks is already being reached.

In a fully deployed Massive MIMO network, utilising 3D beamforming connections to individual devices will be more robust. This means that managing hand-offs between cell sites improves and therefore the number of dropped connections decreases significantly.

### Massive MIMO and 5G

To handle the significant increase in data rates and therefore higher network capacity required in 5G networks, the use of Massive MIMO and 3D beamforming techniques are critical. The expectation is that 5G will see data rates rise from 100 Megabits per second to an anticipated >1 Gigabit per second.

Massive MIMO's ability to serve multiple users and multiple devices simultaneously within a condensed area while maintaining fast data rates and consistent performance is why this is viewed as being a key 5G enabler.



Pictured: Filtronic mMIMO antenna radiation diagram

### Massive MIMO and Filtronic

Filtronic has collaborated to develop a Massive MIMO antenna system based on our proprietary antenna technology. Our antennas are based around patented ultra wide band radiating elements, novel electro-optic phase shifters and internal remote electronic tilting technologies that offer a cost-effective, reliable design architecture, ideally suited to Massive MIMO. The use of ultra wide band elements and modular design philosophy means that one antenna platform type can be developed to service a wider customer base.

To achieve 3D beamforming with a Massive MIMO antenna, it is necessary to integrate the radio and antenna technology together. The need for a close working relationship between the radio and antenna manufacturer is therefore essential to the successful development of a Massive MIMO antenna system.

### Who is deploying Massive MIMO?

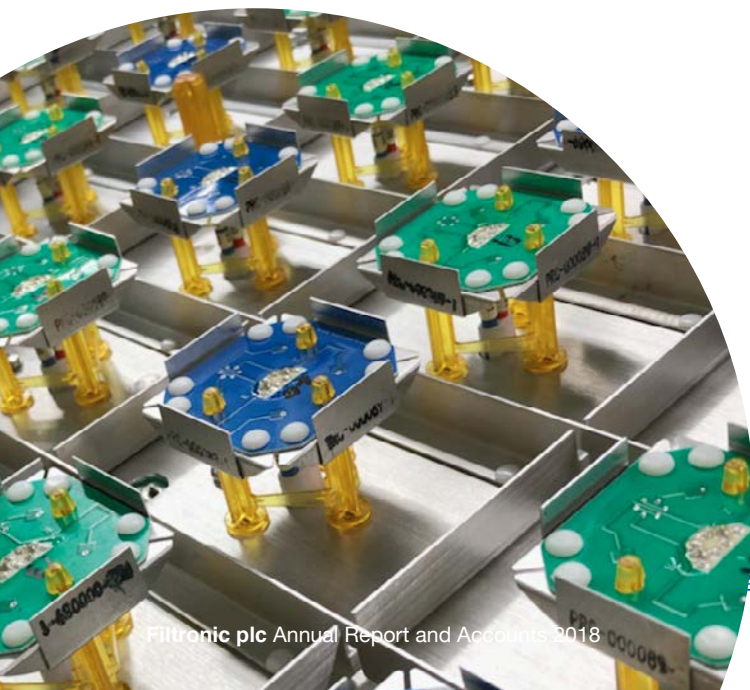
Over the past year, numerous MNOs have announced that they are developing Massive MIMO networks in partnership with the major OEMs. The MNOs who have announced deployments include AT&T, T-Mobile, Verizon, Deutsche Telecom and Vodafone.

### Can current handsets use Massive MIMO?

As mMIMO is being deployed over 4G networks, the latest generation of smartphones are designed to utilise this technology. Devices that are mMIMO enabled include Apple's iPhone 8 and iPhone X, the HTC 10, U11 and U12, the Huawei P9, P10 and P20, the LG G5 and G6, the Samsung Galaxy S7, S8 and S9, and the Sony Xperia X and XZ.

It is worth noting that even older or less capable phones that do not support mMIMO will be able to benefit from the more stable, more sensitive network environment that Massive MIMO will produce.

Pictured: Filtronic mMIMO antenna array radiating elements



# Financial review

The financial year saw steady progress with another year of profitable trading, a strengthening of the balance sheet and good cash generation.

## Revenue

Sales revenue for the Group decreased in the year by 32% to £24.0m (2017: £35.4m).

Filtronic Wireless saw sales reduction of 40% to £18.4m (2017: £30.5m) contributing 77% (2017: 86%) to Group revenue. Despite revenue being down, our strategy of refocusing the business into higher-margin products and applications enabled us to substantially mitigate the revenue decline.

Filtronic Broadband saw revenue growth of 14% with sales increasing to £5.6m (2016: £4.9m) accounting for 23% (2017: 14%) of Group revenue. In line with the strategy to broaden the customer base and markets we serve, it was particularly pleasing to see much of this growth coming from new markets and product offerings which have much longer product life cycles and therefore provide more visibility over future revenues.

## Operating costs

Operating costs reduced in the year as overheads, excluding depreciation, amortisation and other non-cash items, reduced to £8.8m (2017: £9.6m). We continue to invest in our engineering and manufacturing teams to support product development and delivery of contract wins respectively and this is reflected in the average headcount for the year which has increased to 126 (2017: 116). The reduction in overheads is accounted for by the investment in intangible assets as we have capitalised £0.4m (2017: £nil) of product development costs to match against future revenues generated from the development.

## EBITDA

During the year we took the decision to move from adjusted operating profit to EBITDA as an alternative performance measurement. EBITDA is a more widely recognised metric by key stakeholders giving a good indication of the cash generation from the business operations before working capital and capital expenditure requirements. EBITDA for the Group in the year was £2.5m (2017: £2.5m). Filtronic Wireless EBITDA reduced to £2.7m (2017: £4.0m) due to lower revenues although improved product margins helped mitigate the impact. Filtronic Broadband posted EBITDA of £0.5m (2017: £0.6m LBITDA) which represents a significant improvement on the prior year and validates the strategy put in place to return the business unit to profitability.



Reconciliation of EBITDA	2018 £000	2017 £000
Operating profit	1,773	1,702
Depreciation	542	658
Amortisation	141	110
<b>EBITDA</b>	<b>2,456</b>	<b>2,470</b>

## Exceptional cost/(income)

An exceptional cost of £0.5m (2017: £0.7m income) was charged to the income statement due to the revaluation of a US dollar denominated intercompany balance in the Filtronic Wireless UK entity. This was a result of the US dollar weakening against sterling during the year and the intercompany loan to the US subsidiary being worth less in sterling.

## Taxation

A small tax credit of £5k (2017: £1.0m) has been recognised for the year, as set out in note 13 to the financial statements. The Group continues to benefit from R&D tax credits in the UK as we continue to invest in advanced product and process technology development. An R&D tax credit of £0.2m, which relates to the previous financial year, is included in the total credit and was realised as cash in the period.

Following the recent reduction in the US federal corporate tax rate, a write-down of £0.1m was made on the deferred tax asset held in the USA relating to net operating losses carried forward giving a one-off, non-cash impact to reflect the new, lower rate of corporate taxation.

## Capital expenditure

Capital expenditure of £0.6m (2017: £0.8m) included £0.2m for the Filtronic Wireless business (2017: £0.3m) and £0.4m for Filtronic Broadband (2017: £0.5m). Filtronic Wireless invested in production tooling to enable cost savings to improve product margins, whilst Filtronic Broadband invested in new equipment to increase production capacity and improve capability.



## Financial review continued

### Research and development costs

Total R&D costs in the year before capitalisation and amortisation of development costs were £3.1m (2017: £3.1m). The Group continues to invest 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 the development of a wider portfolio of antennas, the mMIMO antenna we have developed in collaboration with Nokia, and E-band products 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	2018 £000	2017 £000
R&D costs in income statement	2,755	3,214
Capitalisation of development costs	436	-
Amortisation of development costs	(95)	(95)
<b>R&amp;D costs before capitalisation and amortisation</b>	<b>3,096</b>	<b>3,119</b>

### 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 2018, the inventory provision was £1.2m (2017: £1.6m).

### 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 2018, the warranty provision was £0.4m (2017: £0.5m); the decrease in the provision at the year end reflected the fact that some of the provision was released unused during FY2018.

### Funding and cash flow

The Group continues to be cash generative and has recorded an increase in cash and cash equivalents to £3.8m (2017: £2.6m) at the year end.

Cash generation from operating activities in the year was £1.8m (2017: £3.9m). The Group invested £1.1m (2017: £1.0m) in capital expenditure and intangible assets. To preserve cash liquidity, capital expenditure in the year was financed through a bank loan and a hire purchase agreement together totalling £0.5m. The full breakdown of this movement can be seen on the consolidated cash flow statement.

Net cash at the end of the period was £3.6m (2017: £2.6m) being £3.8m cash and cash equivalents and £0.2m 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 2018, £nil was drawn down against this facility (2017: £nil). Furthermore, after the year end, the Group entered into an agreement with Wells Fargo Bank for an additional \$4.0m invoice factoring facility in our US operation. This facility is designed to help finance our future growth plans in this key market.

Michael Tyerman

Finance Director

15 August 2018



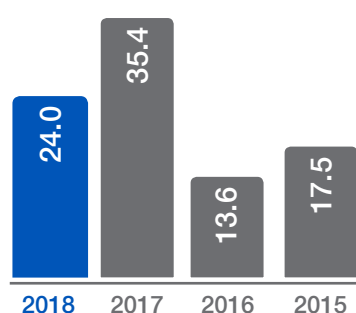
Pictured: 10-port, 8-port and 6-port, 65-degree, ultra wide band base station sector antennas

## 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 as a whole.

### Revenue (£m)

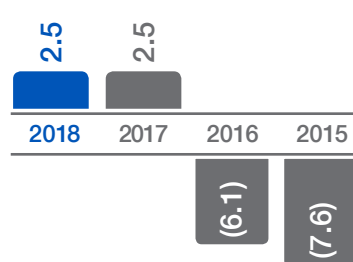
#### £24.0m



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

### EBITDA/(LBITDA) (£m)

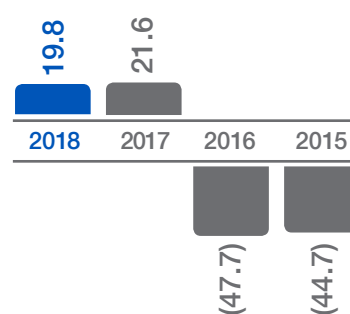
#### £2.5m



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

### EBITDA/(LBITDA) per employee (£k)

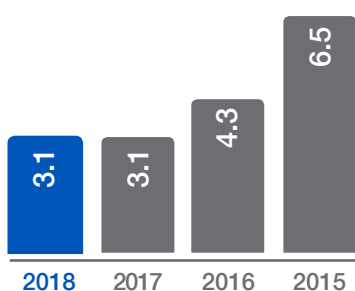
#### £19.8k



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

### Research and development costs (£m)

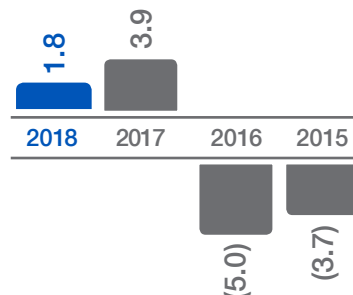
#### £3.1m



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)

#### £1.8m





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	<p>We supply a range of niche products to a small number of large OEM customers as well as a number of MNOs.</p> <p>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.</p> <p>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.</p>	<p>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.</p> <p>We have strengthened the sales teams both directly and indirectly and are actively seeking to increase the number of contract wins across a range of products with an encouraging opportunity pipeline.</p> <p>The sales teams have been reorganised to serve our different markets: telecoms and critical communications. By organising the sales team by market and customer, it is anticipated that our commercial teams will be able to forge deeper relationships with customers and add more focus to our strategy of diversifying the customer base in the markets we serve.</p>	
Manufacturing	<p>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 and decreasing prices, hence we depend on control of our operating environment, including management of security of supply in our supply chain, and the provision of correctly designed technological solutions including the achievement of target cost-reduction plans. Non-performance in these areas would result in a diminished market position.</p>	<p>The Group's internal and outsourced manufacturing processes are accredited under ISO 9001.</p> <p>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.</p> <p>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.</p> <p>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.</p>	



Risk	Nature	Mitigation	Change in year
Technology	<p>Our product competitiveness is heavily influenced by technology choices at product concept stage and throughout the execution of design to product launch.</p> <p>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.</p> <p>For products in the production cycle, technology insertion is often required as a means of achieving price reductions, which underpin sales.</p>	<p>Our ability to remain competitive in terms of technology and product design is underpinned by retaining key staff and effective design methodologies.</p> <p>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.</p> <p>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.</p> <p>In order to protect our intellectual property, we maintain and apply for patents when appropriate.</p>	II
Recruitment and retention	<p>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.</p> <p>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 employment of these people could have an adverse effect on the Group.</p>	<p>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.</p> <p>We continue to invest in our engineering teams to ensure we have the right skills to execute our strategy.</p> <p>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.</p>	▲
Financial management	<p>The Group has specific exposure to credit risk and exchange rate fluctuations. A large proportion of the Group's sales are denominated in US dollars, so the Group is subject to risks associated with currency movements.</p>	<p>The Group has established a number of policies to mitigate these risks, further details of which are presented in note 36 to the financial statements. Predominantly, currency risk on the US dollar is managed through a natural hedge and forward contracts.</p>	II

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 and 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 are 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 quarterly 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. We have appointed a number of graduates across the Group this year and we are also in the process of establishing an apprenticeship programme for FY2019, which we believe will have a positive impact on both the business and society.

## 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/investors/corporate-governance/group-policies/](http://www.filtronic.com/investors/corporate-governance/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.

## 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

This year we have 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. The forum meets quarterly. Over the course of the year, Filtronic employees have participated in and sponsored various events including the Yorkshire Three Peaks Challenge and the Great North Run. To demonstrate our ongoing commitment to the communities in which it operates, the Group has introduced 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, will 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.

The FY2018 Strategic report, from pages 4 to 21, has been reviewed and approved by the Board of Directors on 15 August 2018 and signed on its behalf by

**Rob Smith**  
Chief Executive Officer  
15 August 2018



Pictured: Filtronic staff taking part in the Yorkshire Three Peaks Challenge.



# Governance report

## Board of Directors



### Executive Directors

**Robert (Rob) Smith** (aged 54) was appointed as Chief Executive Officer with effect from 3 March 2015. Prior to this date, he was Chief Financial Officer. He was previously Finance Director at APC Technology Group plc, a distributor of specialist electronic components and smart energy saving products and services provider. Rob has also served as Finance Director at Densitron Technologies plc, a manufacturer and distributor of electronic displays. Rob's earlier career was spent principally in the electronic components industry working for GEC, Centronic and International Rectifier. He is a Chartered Management Accountant and a Fellow of the Chartered Institute of Management Accountants.



**Michael Tyerman** (aged 39) 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

**Reginald (Reg) Gott** (aged 61) has been a Non-Executive Director since 2006. He was appointed as Chairman of the Board at the AGM held in 2015. He continues to act as the Chairman of the Remuneration Committee. 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 Roller** (aged 53) was appointed as a Non-Executive Director on 1 June 2013 and also took over as Chairman of the Audit Committee at the 2015 AGM. In March 2014 he joined the Board of Bioquell plc as Group Finance Director. He has previously been Finance Director of a number of quoted companies, most recently Corin Group plc. He has also held a number of other senior finance roles in a broad range of listed and private companies. He qualified as an accountant with KPMG.

*Photographs of directors by Al Frank Monk Photography*

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

New rules for AIM companies on corporate governance mean that from 28 September 2018, each AIM company must disclose on its website the recognised corporate governance code that its board has decided to apply.

Having compared the provisions of the Quoted Companies Alliance Code 2018 (“the QCA Code”) to the FCA UK Code on Corporate Governance 2016 (“the UK Combined Code”), the Filtronic Board decided that it will, commencing with the financial year ending 31 May 2019, apply the QCA Code. The Board considered that the updated QCA Code embodies the key principles of the UK Combined Code but in a more flexible and outcome-oriented manner more suited to the needs of the Company. The Board does not envisage any material change to the comprehensive governance policies and procedures developed and implemented over the years, and it intends to maintain, in the main, the same high standards of governance.

By 28 September 2018, as required by the new AIM rules, certain prescribed disclosures in relation to the QCA Code will be added to the Company’s website. Next year’s Annual Report will contain required disclosures against the ten principles on the QCA Code. In this report, we describe how we have continued to adhere to the principles of the UK Combined Code where reasonably practical to do so.

I hope you will find this report helpful in understanding our ongoing commitment to good governance.

Reg Gott  
Chairman  
15 August 2018

## Governance framework: Board and committees, membership, remit and activities

### The Board

The Board is comprised of two Executive Directors (Rob Smith, CEO and Michael Tyerman, FD) and two Non-Executive Directors (Reg Gott, Chairman and Michael Roller). 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.

### Relations with shareholders

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 CEO, supported by the FD, both of whom undertake an extensive programme of meetings with shareholders at least twice a year following the release of results announcements. The Chairman is available to speak with shareholders at their request. 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.

### 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 as well as meeting at its engineering design centre in Täby, Sweden.

### Remit of the Board

Whilst day-to-day operational matters are managed by the Chief Executive Officer, 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 controls 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.

## Governance report continued

### Audit Committee

The primary function of the Audit Committee is to assist the Board in fulfilling its financial and risk oversight responsibilities. During the year, it met three times. 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.

### Nominations Committee

The Nominations Committee is chaired by Reg Gott and includes Michael Roller. 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 Reg Gott and includes Michael Roller. 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 of the quality required to run the Company successfully whilst avoiding paying more than is necessary for this purpose.

### Directors' attendance FY2018

The Board normally schedules at least 10 meetings during the year. Last year the Board met 13 times. Attendance at Board meetings and Committee meetings during the year ended 31 May 2018 was as follows:

	Board	Audit	Remuneration	Nominations
Total meetings in year	13	3	6	1
Reg Gott	13	3	6	1
Michael Roller	13	3	6	1
Rob Smith	13	N/A	N/A	N/A
Michael Tyerman	13	N/A	N/A	N/A



# Audit Committee report

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

Michael Roller (Chairman) and Reg Gott.

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](http://www.filtronic.com). The Audit Committee meets at least three times a year and has direct access to KPMG LLP ("KPMG"), 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 2018, the Audit Committee met three times and 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 - Completeness of capitalised development costs;
- Group - Valuation of inventory; 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.

**Completeness of capitalised development costs:** Product development is critical to the Filtronic Group to maintain competitiveness within the market and deliver new and enhanced products to meet the demands of customer programmes. Therefore, Filtronic must continue to invest in engineering resources and ensure it is directing the resources on to programmes that yield the best return. However, given the technical complexity of the products we develop, it is not always known at the outset of developments whether the technical challenges can be overcome and whether the product is going to be commercially viable.

The Committee considered a paper from senior management detailing the timeline of significant developments in the period, demonstrating when the relevant milestones were met against the criteria for capitalising development costs in line with IAS 38.

## Audit Committee report continued

The Committee concluded that the assumptions made by management were reasonable, appropriate and consistent with the accounting standard.

**Valuation of inventory:** Filtronic operates in an industry where developments in product technology and the highly customer-specific nature of some inventory may result in inventory becoming slow-moving or obsolete. This in turn may mean that inventory cannot be sold or sales prices for such inventory is discounted to less than the relevant inventory's book value.

The Committee considered a paper from senior management analysing this inventory by customer and looking at projected future usage relative to current inventory on hand. It reviewed the provision for excess and obsolete inventory and noted that the level of provision and the methodology applied were appropriate and consistent.

**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 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 KPMG has carried out its duties as the auditor in a diligent and professional manner.

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

held office as the auditor for 16 years; in accordance with professional guidelines, the engagement partner is rotated after at most five years and the current partner is in their final year of the engagement.

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 KPMG remained effective and independent in carrying out its responsibilities up to the date of signing this report. Having served for 16 years as the auditor, the Audit Committee feels it is appropriate to put the audit appointment out to tender in order to maintain good corporate governance. KPMG will be proposed for re-appointment as the auditor at the Annual General Meeting although a tender process will take place during the upcoming financial year.

After careful consideration of the advice of the Audit Committee, the Board has concluded that the 2018 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 2018.

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/corporate-governance/remuneration-committee](http://www.filtronic.com/investors/corporate-governance/remuneration-committee).

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

**Reg Gott**  
Chairman, Remuneration Committee  
15 August 2018

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

Name	Executive service agreement appointment date	Key current terms	Notice period
<b>Rob Smith</b> <b>CEO</b>	Appointed to the Board on 16 June 2014 Appointed CEO on 3 March 2015	Base salary £161,534 Car allowance Annual bonus Health insurance Pension	12 months
<b>Michael Tyerman</b> <b>Finance Director</b>	Appointed to the Board on 1 April 2016	Base salary £92,455 Car allowance Annual bonus Health insurance Pension	6 months

Name	Role	Non-Executive terms of appointment date	Fee	Notice period
<b>Reg Gott</b>	Chairman, Nominations Committee Chairman and Remuneration Committee Chairman	Appointed to the Board on 13 July 2006 Appointed Chairman on 27 November 2015	£60,000	6 months
<b>Michael Roller</b>	Audit Committee Chairman	Appointed to the Board on 1 June 2013	£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		Bonus		Benefits		Total remuneration excluding pension contributions and share-based payments	
	FY2018	FY2017	FY2018	FY2017	FY2018	FY2017	FY2018	FY2017
<b>Executive Directors</b>								
Rob Smith	<b>157</b>	154	-	141	<b>11</b>	11	<b>168</b>	306
Michael Tyerman	<b>90</b>	82	-	40	<b>8</b>	8	<b>98</b>	130
<b>Non-Executive Directors</b>								
Reg Gott	<b>60</b>	60	-	-	-	-	<b>60</b>	60
Michael Roller	<b>40</b>	35	-	-	-	-	<b>40</b>	35
<b>Total</b>	<b>347</b>	331	-	181	<b>19</b>	19	<b>366</b>	531

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

#### Taxable benefits

Taxable benefits in kind were unchanged in FY2018 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 FY2018

There was no bonus payment relating to FY2018.

#### Annual performance-related bonus plan

An annual performance-related bonus plan has been introduced for the year ending 31 May 2019 which will reward Executive Directors and key management and staff cash bonuses for delivering stretching profit targets aligned to the 2019 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	
	FY2018	FY2017
Rob Smith	<b>13</b>	12
Michael Tyerman	<b>7</b>	7
<b>Total</b>	<b>20</b>	19

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 2018, in the Company's ordinary shares, which excludes interests under the share option schemes, are set out below:

	2018		2017	
	Shares	%	Shares	%
Rob Smith	<b>257,656</b>	<b>0.1%</b>	257,656	0.1%
Michael Tyerman	<b>11,882</b>	<b>0.0%</b>	11,882	0.0%
Reg Gott	<b>354,429</b>	<b>0.2%</b>	354,429	0.2%
Michael Roller	<b>101,762</b>	<b>0.0%</b>	101,762	0.0%
	<b>725,729</b>	<b>0.3%</b>	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 2018 held the following options over the ordinary shares of the Company:

	Plan	Exercise period	Option price	2018	2017
Rob Smith	ESOP	01/03/2019—28/02/2026	5.37p	<b>1,000,000</b>	1,000,000
Rob Smith	SAYE	01/06/2019—30/11/2019	5.20p	<b>165,565</b>	165,565
Michael Tyerman	ESOP	01/03/2019—28/02/2026	5.37p	<b>300,000</b>	300,000
Michael Tyerman	SAYE	01/06/2019—30/11/2019	5.20p	<b>275,478</b>	275,478
				<b>1,741,043</b>	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 30.

The closing middle market price on 31 May 2018 was 9p, and on 31 May 2017 it was 12p. The range of middle market share prices during the year ended 31 May 2018 was 8p—16p.

There were no changes in directors' interests between 31 May 2018 and 15 August 2018. 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 2018.

## 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 15.

After a review of forecasts including projections of profitability and cash flows for the year to 15 August 2019, 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  
Michael Tyerman  
Reg Gott  
Michael Roller

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.

## 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 were £3.1m (2017: £3.1m), of which £0.4m was capitalised (2017: £nil). Amortisation of development costs in the year was £0.1m (2017: £0.1m).

## Substantial shareholdings

Up to 31 May 2018 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 2018 (as disclosed by shareholders via TR1) is set out in the table below. As at 31 May 2018, the Company had issued share capital of 206,910,146 ordinary shares of 0.1p each.

## Financial results and dividend

The results for the year are set out in the income statement on page 35. The position at the end of the year is shown in the balance sheet on page 37.

The Directors are not recommending payment of a dividend (2017: £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 September 2017.

## Top Investors

Rank	Investor	31-May-18	%
1	Legal & General Investment Mgt	30,994,078	14.98
2	Mrs Diana M Dixon	29,000,000	14.02
3	Canaccord Genuity Wealth Management	21,701,200	10.49
4	Mr David Newlands and Mrs Monique Newlands	11,685,000	5.64
5	River & Mercantile Asset Mgt	11,333,451	5.48



### Political and charitable contributions

No contributions were made for political purposes (2017: £nil). The Group made charitable donations of £1,244 in the year (2017: £nil).

### 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 25 October 2018 at the offices of Pinsent Masons, 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.

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

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

Maura Moynihan  
Company Secretary  
15 August 2018

# Independent auditor's report to the members of Filtronic plc

## 1 Our opinion is unmodified

We have audited the financial statements of Filtronic plc ("the Company") for the year ended 31 May 2018 which comprise the Consolidated Income Statement, the Consolidated Statement of Comprehensive Income, the Consolidated Balance Sheet, the Consolidated Statement of Changes in Equity, the Company Statement of Changes in Equity, the Consolidated Cash Flow Statement, the Company Balance Sheet, the Company Cash Flow Statement and the related notes, including the accounting policies in note 1.

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 May 2018 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards as adopted by the European Union ("IFRSs as adopted by the EU");
- the Parent Company financial statements have been properly prepared in accordance with IFRSs as adopted by the EU and as applied in accordance with the provisions of the Companies Act 2006; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

## Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We have fulfilled our ethical responsibilities under, and are independent of the Group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to listed entities. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion.

## 2 Key audit matters: Our assessment of risks of material misstatement

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the financial statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, 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 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. In arriving at our audit opinion above, the key audit matters, in decreasing order of audit significance, were as follows:

## Group: Completeness of Capitalised Development Costs

(Capitalised £0.4m; 2017 £nil—expensed £2.7m; 2017 £3.1m)

Risk vs 2017 ◀ ▶

Refer to page 43 (accounting policies) and pages 55 to 56 (financial disclosures).

## The Risk

Accounting application

The Group incurs development expenditure as it continues to develop new applications and products for its portfolio. Under the relevant accounting standard, development costs should be capitalised if certain criteria are met and there is an inherent judgement as to whether and when these criteria are met for each development project. To date, minimal costs have been capitalised under IAS 38 as the Group deem that IAS 38 criteria have not been met for each project. There is, therefore, a risk that costs which should be capitalised are expensed.

## Our Response

Our procedures included:

- **Control Design and Observations:** Evaluate the Group's processes and controls over the identification and classification of development costs.
- **Testing Application:** Critically assessing the Group's accounting paper on the development spend in the year, by considering the conclusions made by the Group against the criteria in the relevant accounting standard. This includes assessing against our own expectations based on our knowledge of the entity and experience of the industry in which it operates.
- **Test of Details:** Considering all development projects on which expenditure was incurred during the year, against the capitalisation criteria in the relevant accounting standard and corroborating key assumptions with reference to our understanding of the business and third-party documentation.

## Group: Carrying Value of Inventory

(£2.1m; 2017: £2.2m)

Risk vs 2017 ◀ ▶

Refer to page 45 (accounting policies) and page 57 (financial disclosures).

## The Risk

Subjective estimate

The risk relating to the valuation of inventories arises from the judgement required to estimate net realisable value. Products are high-tech and often specific to individual customers which means that net realisable value is determined by the directors' estimate of forecast customer demand and selling price.

## Our Response

Our procedures included:

- **Test of Details:** Sampling individual items of the inventory on the balance sheet at the year end and comparing recent selling prices of the sampled items to the carrying value net of provisions.
- **Test of Details:** On a sample basis, compared the level of inventory obsolescence provision against individual inventory lines, when considered against the most recent usage of those inventory items in ongoing projects or sales.
- **Our Sector Experience:** Assessing the reasonableness of management's assumption that stock not provided for can be reused going forward against our knowledge of the Group and the market in which it operates.
- **Historical Comparisons:** Assessing the accuracy of the provision in previous years by comparison to the margin achieved.

## Parent Company: Carrying Value of Investment in Subsidiary

(£10.6m; 2017: £10.6m)

Risk vs 2017 ◀ ▶

Refer to page 44 (accounting policies) and page 54 (financial disclosures).

## The Risk

Forecast-based valuation

The carrying amount of the Parent Company's investment in subsidiaries is a material balance, representing 60% (2017: 45%) of the company's total assets. The estimated recoverable amount of these balances is subjective due to the inherent uncertainty in the forecast cash flows used.

## Our Response

Our procedures included:

- **Benchmarking Assumptions:** Challenging the growth rate assumption in the assessment of the recoverable amount, by comparing to third-party market data.
- **Historical Comparisons:** Assessing the reasonableness of the budgets used in the assessment by considering the historical accuracy of previous forecasts.
- **Sensitivity Analysis:** Performing sensitivity analyses over the growth rate and discount rate assumptions adopted and considering the outcomes with reference to external benchmarks when available.

## 3 Our application of materiality and an overview of the scope of our audit

The materiality for the Group financial statements as a whole was set at £250,000 (2017: £270,000), determined with reference to a benchmark of revenue, of which it represents 1.0% (2017: 4.9% of Group profit or loss before tax normalised over a three-year period). We consider revenue

to be a more appropriate benchmark as it provides a more stable measure year on year than Group profit before tax.

Materiality for the Parent Company financial statements as a whole was set at £149,000 (2017: £100,000), determined with a reference to a benchmark of net assets and chosen to be lower than materiality for the Group financial statements as a whole. It represents 0.9% (2017: 0.6%) of the stated benchmark.

We agreed to report to the Audit Committee any corrected and uncorrected identified misstatements exceeding £12,500 (2017: £13,500) in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the Group's 5 (2017: 5) reporting components, we subjected 3 (2017: 3) to full scope audits for Group purposes. The components within the scope of our work accounted for 96.1% of Group Revenue, 89.8% of Group Profit Before Tax and 71% of Group Total Assets. For the residual 2 components, we performed analysis at an aggregated Group level to re-examine our assessment that there were no significant risks of material misstatement within these.

The Group team performed all audit procedures on the relevant components and approved the component materialities, which ranged from £110,000 to £250,000 (2017: £90,000 to £250,000), having regard to the mix of size and risk profile of the Group across the components.

## 4 We have nothing to report on going concern

We are required to report to you if we have concluded that the use of the going concern basis of accounting is inappropriate or there is an undisclosed material uncertainty that may cast significant doubt over the use of that basis for a period of at least twelve months from the date of approval of the financial statements. We have nothing to report in these respects.

## 5 We have nothing to report on the other information in the Annual Report

The directors are responsible for the other information presented in the Annual Report together with the financial statements. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in the other information.



# Independent auditor's report to the members of Filtronic plc continued

## Strategic report and Directors' report

Based solely on our work on the other information:

- we have not identified material misstatements in the Strategic report and the Directors' report;
- in our opinion, the information given in those reports for the financial year is consistent with the financial statements; and
- in our opinion, those reports have been prepared in accordance with the Companies Act 2006.

## 6 We have nothing to report on the other matters on which we are required to report by exception

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

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

We have nothing to report in these respects.

## 7 Respective responsibilities

### Directors' responsibilities

As explained more fully in their statement set out on page 30, the directors are responsible for: the preparation of the financial statements including being satisfied that they give a true and fair view; 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; assessing the Group and Parent 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 they either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

### Auditor's responsibilities

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 our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not 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 aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

A fuller description of our responsibilities is provided on the FRC's website at [www.frc.org.uk/auditorsresponsibilities](http://www.frc.org.uk/auditorsresponsibilities).

## 8 The purpose of our audit work and to whom we owe our responsibilities

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Johnathan Pass (Senior Statutory Auditor)  
for and on behalf of KPMG LLP, Statutory Auditor  
Chartered Accountants  
1 Sovereign Square  
Sovereign Street  
Leeds  
LS1 4DA

# Consolidated income statement

for the year ended 31 May 2018

	Note	Group	
		2018 £000	2017 £000
<b>Revenue</b>		<b>23,995</b>	35,373
<b>Earnings before interest, taxation, depreciation and amortisation</b>		<b>2,456</b>	2,470
Depreciation	17	(542)	(658)
Amortisation of other intangible assets	16	(46)	(15)
Amortisation of development costs	16	(95)	(95)
<b>Operating profit</b>	4	<b>1,773</b>	1,702
Finance costs		(61)	(287)
Exceptional finance items	5	(486)	-
Finance costs	11	(547)	(287)
Exceptional finance items	5	-	740
Finance income	12	-	740
<b>Profit before taxation</b>		<b>1,226</b>	2,155
Taxation	13	5	962
<b>Profit for the period</b>		<b>1,231</b>	3,117
<b>Basic earnings per share</b>	14	<b>0.59p</b>	1.51p
<b>Diluted earnings per share</b>	14	<b>0.59p</b>	1.49p

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

The above results are all as a result of continuing operations.

# Consolidated statement of comprehensive income

for the year ended 31 May 2018

		Group	
	Note	2018 £000	2017 £000
<b>Profit for the period</b>		<b>1,231</b>	3,117
<b>Other comprehensive income</b>			
<b>Items that are or may be subsequently reclassified to profit and loss:</b>			
Currency translation movement arising on consolidation	27	<b>178</b>	(541)
<b>Total comprehensive income for the period</b>		<b>1,409</b>	2,576

The total comprehensive 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 income other than the loss for the year. Accordingly, no Company statement of comprehensive income has been presented.

# Consolidated balance sheet

at 31 May 2018

		Group	
	Note	2018 £000	2017 £000
<b>Non-current assets</b>			
Goodwill and other intangibles	16	3,904	3,590
Property, plant and equipment	17	1,411	1,354
Deferred tax	18	965	1,015
		<b>6,280</b>	5,959
<b>Current assets</b>			
Inventories	19	2,138	2,249
Trade and other receivables	20	6,388	8,643
Cash and cash equivalents		3,794	2,598
		<b>12,320</b>	13,490
<b>Total assets</b>		<b>18,600</b>	19,449
<b>Current liabilities</b>			
Trade and other payables	21	5,076	8,061
Provisions	22	485	545
Deferred income	23	360	105
Financial liabilities	24	206	-
		<b>6,127</b>	8,711
<b>Non-current liabilities</b>			
Deferred income	23	-	11
Financial liabilities	24	312	-
		<b>312</b>	11
<b>Total liabilities</b>		<b>6,439</b>	8,722
<b>Net assets</b>		<b>12,161</b>	10,727
<b>Equity</b>			
Share capital	25	10,788	10,788
Share premium	26	10,640	10,640
Translation reserve	27	(618)	(796)
Retained earnings	29	(8,649)	(9,905)
<b>Total equity</b>		<b>12,161</b>	10,727

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

Company number 2891064.

Approved by the Board on 15 August 2018 and signed on its behalf by

Rob Smith  
Chief Executive Officer  
15 August 2018



## Consolidated statement of changes in equity

for the year ended 31 May 2018

	Share capital £000	Share premium £000	Translation reserve £000	Retained earnings £000	Total equity £000
Balance at 1 June 2016	10,788	10,640	(255)	(13,044)	8,129
Profit for the year	-	-	-	3,117	3,117
Share-based payments	-	-	-	22	22
Currency translation movement arising on consolidation	-	-	(541)	-	(541)
Balance at 31 May 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
<b>Balance at 31 May 2018</b>	<b>10,788</b>	<b>10,640</b>	<b>(618)</b>	<b>(8,649)</b>	<b>12,161</b>

## Company statement of changes in equity

for the year ended 31 May 2018

	Share capital £000	Share premium £000	Retained earnings £000	Total equity £000
Balance at 1 June 2016	10,788	10,640	(2,929)	18,499
Loss for the year	-	-	(631)	(631)
Share-based payments	-	-	5	5
Balance at 31 May 2017	10,788	10,640	(3,555)	17,873
Loss for the year	-	-	(695)	(695)
Share-based payments	-	-	5	5
<b>Balance at 31 May 2018</b>	<b>10,788</b>	<b>10,640</b>	<b>(4,245)</b>	<b>17,183</b>

# Consolidated cash flow statement

for the year ended 31 May 2018

	Group	
	2018 £000	2017 £000
<b>Cash flows from operating activities</b>		
Profit for the period	1,231	3,117
Taxation	(5)	(962)
Finance income	-	(740)
Finance costs	547	287
<b>Operating profit</b>	<b>1,773</b>	<b>1,702</b>
Share-based payments	25	22
Profit on disposal of plant and equipment	(48)	(85)
Depreciation	542	658
Amortisation of intangibles	141	110
Movement in inventories	111	(493)
Movement in trade and other receivables	2,259	(214)
Movement in trade and other payables	(3,292)	559
Movement in provision	(60)	384
Change in deferred income	244	(376)
Tax received	56	1,599
<b>Net cash from operating activities</b>	<b>1,751</b>	<b>3,866</b>
<b>Cash flows from investing activities</b>		
Interest paid	(61)	(286)
Capitalisation of development costs	(436)	-
Acquisition of intangible assets	(19)	-
Acquisition of plant and equipment	(604)	(811)
Proceeds on sale of assets	49	86
<b>Net cash used in investing activities</b>	<b>(1,071)</b>	<b>(1,011)</b>
<b>Cash flows from financing activities</b>		
Proceeds from bank loans	300	-
Payment of bank loans	(75)	-
Proceeds from hire purchase agreements	301	-
Payment of interest-bearing borrowings	-	(1,270)
<b>Net cash from/(used in) financing activities</b>	<b>526</b>	<b>(1,270)</b>
<b>Movement in cash and cash equivalents</b>	<b>1,206</b>	<b>1,585</b>
Currency exchange movement	(10)	23
Opening cash and cash equivalents	2,598	990
<b>Closing cash and cash equivalents</b>	<b>3,794</b>	<b>2,598</b>

# Company balance sheet

at 31 May 2018

		Company	
	Note	2018 £000	2017 £000
<b>Non-current assets</b>			
Investments in subsidiaries	15	<b>10,564</b>	10,564
Intangible assets	16	<b>122</b>	143
		<b>10,686</b>	10,707
<b>Current assets</b>			
Trade and other receivables	20	<b>11,528</b>	12,472
Cash and cash equivalents		<b>342</b>	124
		<b>11,870</b>	12,596
<b>Total assets</b>		<b>22,556</b>	23,303
<b>Current liabilities</b>			
Trade and other payables	21	<b>5,373</b>	5,430
<b>Total liabilities</b>		<b>5,373</b>	5,430
<b>Net assets</b>		<b>17,183</b>	17,873
<b>Equity</b>			
Share capital	25	<b>10,788</b>	10,788
Share premium	26	<b>10,640</b>	10,640
Retained earnings	29	<b>(4,245)</b>	(3,555)
<b>Total equity</b>		<b>17,183</b>	17,873

Company number 2891064.

Approved by the Board on 15 August 2018 and signed on its behalf by

Rob Smith  
Chief Executive Officer  
15 August 2018

# Company cash flow statement

for the year ended 31 May 2018

	Company	
	2018 £000	2017 £000
<b>Cash flows from operating activities</b>		
<b>Loss for the period</b>	<b>(695)</b>	<b>(631)</b>
Finance costs	34	34
<b>Operating loss</b>	<b>(661)</b>	<b>(597)</b>
Amortisation of intangibles	26	26
Share-based payments	5	5
Movement in trade and other receivables	944	567
Movement in trade and other payables	(58)	36
<b>Net cash from operating activities</b>	<b>256</b>	<b>37</b>
<b>Cash flows from investing activities</b>		
Acquisition of intangible assets	(5)	(5)
<b>Net cash used in investing activities</b>	<b>(5)</b>	<b>(5)</b>
<b>Cash flows from financing activities</b>		
Interest paid	(33)	(33)
<b>Net cash used in financing activities</b>	<b>(33)</b>	<b>(33)</b>
<b>Increase/(decrease) in cash and cash equivalents</b>	<b>218</b>	<b>(1)</b>
Opening cash and cash equivalents	124	125
<b>Closing cash and cash equivalents</b>	<b>342</b>	<b>124</b>



# Notes to the financial statements

for the year ended 31 May 2018

## 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.

In accordance with the 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.

### Revenue

Revenue is recognised for goods and services during the periods when the risks and rewards of ownership have been transferred to the customer, there is no continuing management involvement and the amount of revenue can be measured reliably. Revenue excludes any related value added or sales tax.

The timing of the transfers of risks and rewards varies depending on the individual terms of the contract of sale. The majority of sales in the Group are made at the point the product leaves the Filtronic production facility but there are sales to a number of customers where the revenue is recognised once the product is delivered to the customer. In addition, some customers require Filtronic to store items on their behalf in vendor-managed inventory at third-party locations; in this instance, revenue is recognised when the goods have been moved out of the location by the customer and a consumption advice has been provided.

## 1 Accounting policies (continued)

Contracts undertaken to provide an engineering service, such as the design of a product, funded by the customer is recognised as revenue when the outcome of the contract can be estimated reliably and the contract revenue is recognised in the income statement in proportion to the stage of completion of the contract. The stage of completion is assessed against project milestones. Otherwise, contract revenue is recognised only to the extent of contract costs incurred that are likely to be recoverable.

### Research and development

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.

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.

### Operating leases

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

### Share-based payments

The Group operates 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.

# Notes to the financial statements continued

## for the year ended 31 May 2018

### 1 Accounting policies (continued)

#### 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 annually and when there is an indication of impairment. The goodwill carrying value is written down to its recoverable amount.

#### 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, or another amount substituted for cost, 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.

## 1 Accounting policies (continued)

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

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.

### 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.

### 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 provided using the balance sheet liability method. Provision is made for temporary differences between the carrying amounts of assets and liabilities in the financial statements and the amounts for taxation purposes.

Temporary differences are not provided for the initial recognition of assets or liabilities that affect neither accounting nor taxable profit. No provision is made for differences relating to investments in subsidiaries to the extent that they will probably not reverse in the foreseeable future.

The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantially enacted at the balance sheet date.

Deferred tax assets are recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised.

### Grants

Capital-based grants 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.

### 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 economic benefits will be required to settle the obligation. A warranty provision is recognised when products are sold. The provision is 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.



# Notes to the financial statements continued

## for the year ended 31 May 2018

### 1 Accounting policies (continued)

#### 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

The following new standards and amendments to standards are mandatory for the first time for the financial year beginning 1 June 2017:

- IFRS 9 "Financial Instruments" will supersede IAS 39 "Financial Instruments – Recognition and Measurement" and is effective for annual periods beginning on or after 1 June 2018. IFRS 9 covers classification and measurement of financial assets and financial liabilities, impairment of financial assets and hedge accounting.
- IFRS 15 "Revenue from Contracts with Customers" provides a single model for accounting for revenue arising from contracts with customers, focusing on the identification and satisfaction of performance obligations, and is effective for annual periods beginning on or after 1 June 2018. IFRS 15 will supersede IAS 18 "Revenue" and IAS 11 "Construction Contracts".
- IFRS 16 "Leases" provides a new model for lessee accounting in which all leases, other than short-term and small-ticket item leases, will be accounted for by the recognition on the balance sheet of a right-to-use asset and a lease liability, and the subsequent amortisation of the right-to-use asset over the lease term. IFRS 16 will be effective for annual periods beginning on or after 1 June 2019.

The directors have considered the impact of IFRS 9 and IFRS 15 and conclude that these new standards are not expected to have a significant impact on the accounts when adopted. With regard to IFRS 9, the only area considered of key relevance relates to provisions in respect of trade receivables. Given the Group's approach to provisions for doubtful or bad debts, the directors consider that no further analysis will be required. On the matter of IFRS 15, the Group has undertaken a review of all current revenue streams and contracts and believes there will not be any material changes but will conclude once the conversion process is complete.

The directors continue to assess the impact of IFRS 16 before it is implemented for periods beginning on or after 1 June 2019. The Group currently has property lease agreements in place for its main sites of business in the UK, the USA, Sweden and China which are currently accounted for as operating leases. These property leases typically span periods of between one and five years. The adoption of the standard will have a material impact on the balance sheet of the Group when recognising the property asset and the present value of future lease payments. There are no other significant leases in the Group other than these property leases. The Group will be able to give a quantification of the impact of IFRS 16 by the end of FY2019.

## 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 customer 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. The provision 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.

### 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 2018

## 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.

Operating segments have then been identified based on the reporting information and management structures within the Group. The Group has three customers representing individually over 10% each and in aggregate 76% of revenue. This is split as follows:

- Customer A (Filtronic Wireless and Filtronic Broadband) — 35%
- Customer B (Filtronic Wireless) — 29%
- Customer C (Filtronic Wireless) — 12%

The Group has historically operated in two trading business segments in addition to central services:

- The design of radio frequency conditioning products for base stations used in wireless telecommunication networks (Filtronic Wireless);
- The design and manufacture of transceiver modules and filters for backhaul microwave linking of base stations used in wireless telecommunication networks (Filtronic Broadband); and
- A central services segment that provides support to the trading businesses.

In the table below reportable segment assets and liabilities include intersegment balances. These have been included to reflect the assets and liabilities of the segment as monies are freely moved around the Group to provide funding for working capital where required.

	Filtronic Broadband		Filtronic Wireless		Central services		Total	
	2018 £000	2017 £000	2018 £000	2017 £000	2018 £000	2017 £000	2018 £000	2017 £000
Revenue	<b>5,593</b>	4,917	<b>18,402</b>	30,456	-	-	<b>23,995</b>	35,373
<b>Earnings/(loss) before interest, taxation, depreciation and amortisation</b>	<b>543</b>	(597)	<b>2,722</b>	3,956	<b>(809)</b>	(889)	<b>2,456</b>	2,470
Depreciation	<b>(286)</b>	(304)	<b>(256)</b>	(354)	-	-	<b>(542)</b>	(658)
Amortisation of other intangible(s) assets	<b>(5)</b>	-	<b>(13)</b>	-	<b>(28)</b>	(15)	<b>(46)</b>	(15)
Amortisation of development costs	<b>(33)</b>	(33)	<b>(62)</b>	(62)	-	-	<b>(95)</b>	(95)
<b>Reportable segment operating profit/(loss)</b>	<b>219</b>	(934)	<b>2,391</b>	3,540	<b>(837)</b>	(904)	<b>1,773</b>	1,702
Finance costs	<b>(10)</b>	-	<b>(494)</b>	(264)	<b>(43)</b>	(23)	<b>(547)</b>	(287)
Finance income	-	-	-	740	-	-	-	740
<b>Profit/(loss) before taxation</b>	<b>209</b>	(934)	<b>1,897</b>	4,016	<b>(880)</b>	(927)	<b>1,226</b>	2,155
Reportable segment assets	<b>5,550</b>	3,082	<b>9,300</b>	12,817	<b>14,267</b>	15,012	<b>29,117</b>	30,911
Capital expenditure	<b>359</b>	467	<b>245</b>	344	-	-	<b>604</b>	811
Reportable segment liabilities	<b>12,182</b>	10,078	<b>6,863</b>	12,141	<b>462</b>	516	<b>19,507</b>	22,735

### 3 Segmental analysis (continued)

#### Reconciliation of reportable segment assets and liabilities

	2018 £000	2017 £000
<b>Assets</b>		
Total assets for reportable segments	29,117	30,911
Intercompany	(13,068)	(14,013)
Group/unallocated	2,551	2,551
Consolidated total assets	18,600	19,449
<b>Liabilities</b>		
Total liabilities for reportable segments	19,507	22,735
Intercompany	(13,068)	(14,013)
Consolidated total liabilities	6,439	8,722

#### 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.

	2018 £000	2017 £000
<b>Revenue by destination</b>		
United Kingdom	2,529	218
Europe	4,898	18,696
Americas	13,780	14,602
Rest of the world	2,788	1,857
	23,995	35,373

	2018 £000	2017 £000
<b>Split of non-current assets by location</b>		
United Kingdom	4,797	4,459
Europe	76	107
Americas	1,256	1,255
Rest of the world	151	138
	6,280	5,959

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



# Notes to the financial statements continued

for the year ended 31 May 2018

## 4 Operating profit

	2018 £000	2017 £000
<b>Revenue</b>	<b>23,995</b>	35,373
<b>Material cost of goods sold</b>	<b>12,756</b>	23,315
Wages and salaries	5,454	5,479
Social security costs	722	637
Pension costs	386	338
Share-based payments	25	22
Staff costs	6,587	6,476
Amortisation of development costs	95	95
Amortisation of other intangible assets	46	15
Depreciation	542	658
Depreciation and amortisation	683	768
Other operating income	(229)	(24)
Other expenses	2,425	3,136
<b>Total operating costs</b>	<b>9,466</b>	10,356
<b>Operating profit</b>	<b>1,773</b>	1,702

## 5 Exceptional items

Finance costs/(income) is stated after charging/(crediting) exceptional items as follows:

	2018 £000	2017 £000
Revaluation of US dollar denominated intercompany balance	486	(740)
	486	(740)

An intercompany relationship exists between the Filtronic Wireless subsidiaries in the UK and the USA. The balance is denominated in US dollars and is owed to the UK subsidiary. The US dollar has seen significant volatility during the year which has led to a large cost on revaluation in the UK entity.

## 6 Operating items

	2018 £000	2017 £000
Operating profit is stated after charging/(crediting):		
Depreciation of property, plant and equipment	542	658
Research and development costs before capitalisation/amortisation of development costs	3,096	3,119
Development costs capitalised	(436)	-
Amortisation of development costs	95	95
Amortisation of other intangibles	46	15
Operating lease rentals	339	383
Foreign exchange (gain)/loss	(79)	123

## 7 Auditor's remuneration

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

	2018 £000	2017 £000
Company auditor:		
Audit of the Group and Company financial statements	20	12
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	2
	<b>68</b>	<b>60</b>

## 8 Employees

The average number of employees comprised:

	2018 Number	2017 Number
Manufacturing	60	56
Research and development	46	44
Sales	6	5
Administration	14	11
	<b>126</b>	<b>116</b>

# Notes to the financial statements

for the year ended 31 May 2018

## 9 Compensation of directors

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

	2018 £000	2017 £000
Salary or fees	347	331
Bonuses	-	181
Benefits	19	19
Total remuneration excluding pension contributions and share-based payments	366	531
Pension contributions	20	19
	<b>386</b>	<b>550</b>

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

## 10 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 (2017: £432,000) and a royalty charge of 1% of Filtronic Wireless sales to the Filtronic Wireless business of £184,000 (2017: £305,000). The royalty charge is 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 20 and 21 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.

## 11 Finance costs

	2018 £000	2017 £000
Interest costs on loans for plant and equipment	10	-
Minimum service costs and interest charges on invoice discounting facilities	51	233
Termination fee of Faunus Group International ("FGI") invoice discounting facility	-	54
Revaluation of US dollar denominated intercompany balance	486	-
	<b>547</b>	<b>287</b>

## 12 Finance income

	2018 £000	2017 £000
Revaluation of US dollar denominated intercompany balance	-	740
	<b>-</b>	<b>740</b>

## 13 Taxation

	2018 £000	2017 £000
Recognised in the income statement		
<b>Current tax credit</b>		
Overseas taxation in the period	188	62
Adjustment in respect of prior year — R&D tax credit	(243)	(843)
Total current tax credit	(55)	(781)
<b>Deferred tax credit</b>		
Origination of temporary differences	(93)	(181)
Change of corporation tax rate	143	-
Total deferred tax charge/(credit)	50	(181)
Income tax credit	(5)	(962)

The reconciliation of the effective tax rate is as follows:

	2018 £000	2017 £000
Profit before taxation	1,226	2,155
	2018 £000	2017 £000
Profit before taxation multiplied by standard rate of corporation tax in the UK	19% 319	20% 427
Disallowable items	9% 157	5% 98
Income not taxable	(1%) (18)	(9%) (196)
Deferred tax asset not recognised	14% 237	16% 335
Impact of tax rate change on deferred tax	9% 143	4% 83
Enhanced R&D tax credit	(4%) (67)	(17%) (357)
Adjustment in respect of prior year R&D tax credit	(14%) (243)	(39%) (843)
Foreign tax not at UK rate	11% 188	12% 262
Recognition of deferred tax asset previously unrecognised	(6%) (93)	- -
Recognition of deferred tax asset from prior year	(37%) (628)	(36%) (771)
<b>Taxation</b>	<b>0% (5)</b>	<b>(44%) (962)</b>

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

## 14 Earnings per share

	Group	
	2018 £000	2017 £000
Profit for the period	1,231	3,117
	000	000
Basic weighted average number of shares	206,910	206,910
Dilution effect of share options	3,219	2,839
<b>Diluted weighted average number of shares</b>	<b>210,129</b>	<b>209,749</b>
<b>Basic earnings per share</b>	<b>0.59p</b>	<b>1.51p</b>
<b>Diluted earnings per share</b>	<b>0.59p</b>	<b>1.49p</b>

# Notes to the financial statements continued

## for the year ended 31 May 2018

### 15 Investments in subsidiaries

Company  
investments in  
subsidiaries  
£000

Cost	
At 1 June 2016, 31 May 2017 and 31 May 2018	21,110
Impairment	
At 1 June 2016, 31 May 2017 and 31 May 2018	10,546
Carrying amount at 1 June 2016, 31 May 2017 and 31 May 2018	10,564

The Company's subsidiaries are related parties.

The subsidiaries at 31 May 2018, 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 <sup>1</sup>	UK	1p ordinary shares	100%	Design and manufacture of microwave products for telecommunication systems
Filtronic Holdings UK Limited <sup>1</sup>	UK	£1 ordinary shares	100%	Holding Company
Isotek (Holdings) Limited <sup>1</sup>	UK	1p ordinary shares	100%	Holding Company
Filtronic Comtek (UK) Limited <sup>1</sup>	UK	12,2787p ordinary shares	100%	Dormant Company
<b>Owned by Filtronic Holdings (UK) Limited:</b>				
Filtronic Wireless AB <sup>3</sup>	Sweden	SEK1 ordinary shares	100%	Design and manufacture of antenna products for telecommunication systems
<b>Owned by Isotek (Holdings) Limited:</b>				
Filtronic Wireless Limited <sup>1</sup>	UK	1p ordinary shares	100%	Design and manufacture of filters and related products for telecommunication systems
Filtronic Wireless Inc. <sup>2</sup>	USA	US\$1 ordinary shares	100%	Design and manufacture of filters and related products for telecommunication systems
Isotek Limited <sup>1</sup>	UK	1p ordinary shares	100%	Dormant Company
<b>Owned by Filtronic Wireless Limited:</b>				
Isotek Hong Kong Holdings Limited <sup>4</sup>	Hong Kong	HK\$1 ordinary shares	100%	Holding Company
<b>Owned by Isotek Hong Kong Holdings Limited:</b>				
Isotek Suzhou Limited <sup>5</sup>	China	US\$350,000 paid in share capital	100%	Design and manufacture of filters and related products for telecommunication systems
Filtronic Wireless Suzhou <sup>5</sup>	China	US\$162,000 paid in share capital	100%	Design and manufacture of filters and related products for telecommunication systems

<sup>1</sup> Filtronic House, 3 Airport West, Lancaster Way, Yeadon, Leeds, West Yorkshire, LS19 7ZA, UK

<sup>2</sup> 700 Marvel Road, Salisbury, Maryland, 21801, USA

<sup>3</sup> Antennvägen 6A, 18766, Täby, Sweden

<sup>4</sup> RM 1501, C1 Grand Millennium Plaza (lower block), 181 Queen's Road Central, Hong Kong

<sup>5</sup> RM 802, Block 1, No. 135 Wangdun Road, SIP, Suzhou, China



## 16 Goodwill and other intangibles

Group	Goodwill £000	Other intangibles (core technology) £000	Licence agreement £000	Software costs £000	Development costs £000	Total £000
<b>Cost</b>						
At 1 June 2016	3,235	10,884	160	-	286	14,565
Reclassification of software costs	-	-	-	567	-	567
At 31 May 2017	3,235	10,884	160	567	286	15,132
Additions	-	-	-	19	436	455
Disposals	-	-	-	(30)	-	(30)
Currency translation movement	-	-	-	(13)	-	(13)
<b>At 31 May 2018</b>	<b>3,235</b>	<b>10,884</b>	<b>160</b>	<b>543</b>	<b>722</b>	<b>15,544</b>
<b>Amortisation</b>						
At 1 June 2016	-	10,884	33	-	-	10,917
Provided in the year	-	-	15	-	95	110
Reclassification of software costs	-	-	-	515	-	515
At 31 May 2017	-	10,884	48	515	95	11,542
Provided in the year	-	-	15	31	95	141
Disposals	-	-	-	(30)	-	(30)
Currency translation movement	-	-	-	(13)	-	(13)
<b>At 31 May 2018</b>	<b>-</b>	<b>10,884</b>	<b>63</b>	<b>503</b>	<b>190</b>	<b>11,640</b>
Carrying amount at 1 June 2016	3,235	-	127	-	286	3,648
Carrying amount at 31 May 2017	3,235	-	112	52	191	3,590
<b>Carrying amount at 31 May 2018</b>	<b>3,235</b>	<b>-</b>	<b>97</b>	<b>40</b>	<b>532</b>	<b>3,904</b>

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
<b>Reconciliation of amortisation of other intangible assets</b>				
Amortisation of licence agreement	15	15	15	15
Amortisation of software costs	31	-	13	11
<b>Amortisation of other intangible assets</b>	<b>46</b>	<b>15</b>	<b>28</b>	<b>26</b>

The Company accounts include the licence agreements for £97,000 and £25,000 of software costs (2017: licence agreements £112,000, software costs £31,000).

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, which is not higher than the Group's operating segments as reported in note 3. 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 2019 based on past experience, actual operating results, known future cash flows and estimates of future cash flows;
- Cash flows for a further three years have been extrapolated from the year to 31 May 2019. A revenue growth factor of 10% was applied to the projections together with cost inflation of 3%. A perpetuity factor has been applied based on the year to 31 May 2023; and

# Notes to the financial statements continued

## for the year ended 31 May 2018

### 16 Goodwill and other intangibles (continued)

- The Group's discount rate of 12% (2017:12%) 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.

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 capitalisation of development costs is set out in note 1.

### 17 Property, plant and equipment

	Group plant and equipment £000	Company plant and equipment £000
<b>Cost</b>		
<b>At 1 June 2016</b>	7,448	52
Additions	811	-
Disposals	(556)	-
Reclassification of software costs	(567)	(52)
Currency translation movement	119	-
<b>At 31 May 2017</b>	<b>7,255</b>	<b>-</b>
Additions	604	-
Disposals	(457)	-
Reclassification of software costs	-	-
Currency translation movement	(31)	-
<b>At 31 May 2018</b>	<b>7,371</b>	<b>-</b>
<b>Depreciation and impairment</b>		
<b>At 1 June 2016</b>	6,218	14
Depreciation	658	-
Disposals	(556)	-
Reclassification of software costs	(515)	(14)
Currency translation movement	96	-
<b>At 31 May 2017</b>	<b>5,901</b>	<b>-</b>
Depreciation	542	-
Disposals	(456)	-
Currency translation movement	(27)	-
<b>At 31 May 2018</b>	<b>5,960</b>	<b>-</b>
Carrying amount at 1 June 2016	1,230	38
Carrying amount at 31 May 2017	1,354	-
<b>Carrying amount at 31 May 2018</b>	<b>1,411</b>	<b>-</b>

## 18 Deferred tax

	Group	
	2018 £000	2017 £000
<b>Deferred tax assets</b>		
Opening balance	1,015	834
Tax losses recognised	93	264
Effect of change in UK corporation tax rate	(42)	(83)
Effect of change in overseas corporation tax rate	(101)	-
	<b>965</b>	<b>1,015</b>

Deferred tax assets within the Filtronic Wireless subsidiaries in 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.

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
<b>Deferred tax assets which have not been recognised:</b>				
Depreciation in advance of capital allowances	2,161	2,110	457	455
Tax losses carried forward	11,121	12,944	9,322	9,274
Share options deferral	95	80	95	80
	<b>13,377</b>	<b>15,134</b>	<b>9,874</b>	<b>9,809</b>

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.

## 19 Inventories

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
Raw materials	2,895	2,749	-	-
Work in progress	282	79	-	-
Finished goods	128	1,070	-	-
	<b>3,305</b>	<b>3,898</b>	<b>-</b>	<b>-</b>
Inventory provision	(1,167)	(1,649)	-	-
<b>Inventories are stated net of provision</b>	<b>2,138</b>	<b>2,249</b>	<b>-</b>	<b>-</b>

Raw materials, consumables and changes in finished goods and work in progress recognised in cost of sales in the year amounted to £12,756,000 (2017: £22,668,000).

The amount charged to the income statement in the year in respect of write-downs of inventories is £nil (2017: £70,000). The amount credited to the income statement in the year in respect of reversals of write-downs of inventories is £72,000 (2017: £nil).

## 20 Trade and other receivables

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
Trade receivables	5,736	8,079	-	-
Group receivables	-	-	11,479	12,426
Other receivables and prepayments	652	564	49	46
	<b>6,388</b>	<b>8,643</b>	<b>11,528</b>	<b>12,472</b>

There are no provisions for bad debt.

# Notes to the financial statements continued

for the year ended 31 May 2018

## 21 Trade and other payables

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
Trade payables	3,712	6,382	52	24
Group payables	-	-	4,914	4,914
Other payables and accruals	1,364	1,679	407	492
	<b>5,076</b>	8,061	<b>5,373</b>	5,430

## 22 Provisions

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
<b>Warranty provision</b>				
Opening balance	475	161	-	-
Used during the year	(18)	(11)	-	-
Released unused during the year	(79)	(36)	-	-
Charge for the year	47	361	-	-
	<b>425</b>	475	-	-

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.

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
<b>Dilapidation provision</b>				
Opening balance	70	-	-	-
Released unused during the year	(10)	-	-	-
Charge for the year	-	70	-	-
	<b>60</b>	70	-	-

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.

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
<b>Total provision</b>				
Warranty provision	425	475	-	-
Dilapidation provision	60	70	-	-
	<b>485</b>	545	-	-

## 23 Deferred income

Deferred income classified as current consists of a capital grant made by a customer that will be recognised as income in the next year and customer contributions to tooling costs.

## 24 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	
	2018 £000	2017 £000	2018 £000	2017 £000
Bank loans—current	100	-	-	-
Obligations under finance leases—current	106	-	-	-
<b>Total current financial liabilities</b>	<b>206</b>	-	-	-
Bank loans—non-current	117	-	-	-
Obligations under finance leases—non-current	195	-	-	-
<b>Total non-current financial liabilities</b>	<b>312</b>	-	-	-
<b>Total financial liabilities</b>	<b>518</b>	-	-	-

### Terms and debt repayment schedule

	Currency	Nominal interest rate	Date of maturity	Carrying amount 2018 £000	Carrying amount 2017 £000
Bank loan	GBP	7.6%	31 August 2020	217	-
Finance lease	GBP	4.1%	31 May 2021	301	-

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

Finance lease	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
Less than one year	106	-	-	-
Between one and five years	195	-	-	-
	<b>301</b>	-	-	-

Debt reconciliation	Bank loans £000	Finance lease £000	Invoice discounting £000	Total £000
<b>Balance at 1 June 2016</b>	-	-	1,270	1,270
Repayments of borrowings and interest	-	-	(1,270)	(1,270)
<b>Balance at 31 May 2017</b>	-	-	-	-
Proceeds from bank loans	300	-	-	300
Proceeds from finance leases	-	301	-	301
Interest paid	(10)	-	-	(10)
Repayment of borrowings	(73)	-	-	(73)
<b>Balance at 31 May 2018</b>	<b>217</b>	<b>301</b>	-	<b>518</b>



# Notes to the financial statements continued

for the year ended 31 May 2018

## 24 Financial liabilities (continued)

### Banking facilities

At 31 May 2018, 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 entered into an agreement with Wells Fargo Bank after the year end for a facility of \$4.0m enabling it to borrow up to 85% of the US debtor book.

The bank loan, with a current carrying value of £217k, relates to an asset-based loan for plant and equipment at our facility in Sedgefield.

## 25 Share capital

	Group and Company ordinary shares of 0.1p each	
	Number	£000
<b>At 1 June 2016, 31 May 2017 and 31 May 2018</b>	<b>206,910,146</b>	<b>10,788</b>

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.

## 26 Share premium

	Group and Company
<b>At 1 June 2016, 31 May 2017 and 31 May 2018</b>	<b>10,640</b>

## 27 Translation reserve

	Group £000
<b>At 1 June 2016</b>	<b>(255)</b>
Currency translation movement arising on consolidation	(541)
<b>At 1 June 2017</b>	<b>(796)</b>
Currency translation movement arising on consolidation	(178)
<b>At 31 May 2018</b>	<b>(618)</b>

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

## 28 Dividends

The directors are not proposing to pay a dividend for the year ended 31 May 2018 (2017: £nil).

## 29 Retained earnings

	Group £000	Company £000
<b>At 1 June 2016</b>	<b>(13,044)</b>	<b>(2,929)</b>
Profit/(loss) for the period	3,117	(631)
Share-based payments	22	5
<b>At 31 May 2017</b>	<b>(9,905)</b>	<b>(3,555)</b>
Profit/(loss) for the period	1,231	(695)
Share-based payments	25	5
<b>At 31 May 2018</b>	<b>(8,649)</b>	<b>(4,245)</b>

### 30 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

	<b>Weighted average exercise price 2018</b>	<b>Number of options 2018</b>	Weighted average exercise price 2017	Number of options 2017
Outstanding at the beginning of the period	<b>31.0p</b>	<b>78,383</b>	31.0p	84,189
Granted during the period	<b>31.0p</b>	-	31.0p	-
Cancelled during the period	<b>31.0p</b>	<b>(78,383)</b>	31.0p	(5,806)
Outstanding at the end of the period	<b>31.0p</b>	-	31.0p	78,383
Exercisable at the end of the period	<b>31.0p</b>	-	31.0p	-

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

#### Sharesave Plan—Scheme 6

	<b>Weighted average exercise price 2018</b>	<b>Number of options 2018</b>	Weighted average exercise price 2017	Number of options 2017
Outstanding at the beginning of the period	<b>5.2p</b>	<b>6,079,289</b>	5.2p	-
Granted during the period	<b>5.2p</b>	-	5.2p	6,244,854
Cancelled during the period	<b>5.2p</b>	<b>(113,390)</b>	5.2p	(165,565)
Outstanding at the end of the period	<b>5.2p</b>	<b>5,965,899</b>	5.2p	6,079,289
Exercisable at the end of the period	<b>5.2p</b>	-	5.2p	-

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

The options outstanding at 31 May 2018 for Scheme 6 have a weighted average remaining contractual life of 1.5 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.

# Notes to the financial statements continued

for the year ended 31 May 2018

## 30 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 2018:

Ordinary shares of 0.1p	Date granted	Earliest date exercisable	Latest date exercisable	Exercise price
5,256,250	01/03/2016	01/03/2017	28/02/2026	5.4p
500,000	11/04/2016	11/04/2017	10/04/2026	8.5p
750,000	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
<b>6,906,250</b>				

The weighted average price of options of the outstanding options under this scheme at 31 May 2018 was 6.62p.

	Number of share options 2018	Number of share options 2017
Outstanding at the beginning of the period	6,925,000	7,006,624
Granted during the period	400,000	1,250,000
Cancelled during the period	(418,750)	(1,331,624)
Outstanding at the end of the period	6,906,250	6,925,000
Exercisable at the end of the period	-	-

### 31 Share-based payments

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
Share options expense	25	22	5	5
	<b>25</b>	22	<b>5</b>	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	
	2018	2017	2018	2017
Number of share options granted	400,000	7,494,854	400,000	1,215,301
Weighted average share price	11.0p	6.2p	11.0p	5.2p
Expected volatility	50%	50%	50%	50%
Expected life	3.0 years	3.0 years	3.0 years	3.0 years
Risk-free interest rate	0.5%	0.5%	0.5%	0.5%
Weighted average fair value	1.0p	1.0p	1.0p	1.0p

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

### 32 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	
	2018 £000	2017 £000	2018 £000	2017 £000
Less than one year	264	264	-	-
Between one and five years	668	538	-	-
More than five years	-	40	-	-
	<b>932</b>	842	-	-

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.

### 33 Pension costs

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
Defined contribution schemes	386	338	37	33

## Notes to the financial statements continued

for the year ended 31 May 2018

### 34 Capital expenditure commitments

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
Capital expenditure contracted for at the balance sheet date but not provided in the financial statements	259	93	-	-

### 35 Analysis of net cash/(debt)

	1 June 2017 £000	Cash flow £000	Other changes £000	31 May 2018 £000
Cash and cash equivalents	2,598	1,206	(10)	3,794
Bank loans	-	(217)	-	(217)
	2,598	989	(10)	3,577

#### Reconciliation of cash flow to movement in net cash/(debt)

	2018 £000	2017 £000
Movement in cash and cash equivalents	1,206	1,585
Cash flow from (increase)/decrease in debt financing	(217)	1,270
Effect of exchange rate fluctuations	(10)	23
Movement in net cash	979	2,878
Opening net cash/(debt)	2,598	(280)
Closing net cash	3,577	2,598



## 36 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 £3,577,000 whilst the Company has net cash of £342,000. 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	
	2018 £000	2017 £000	2018 £000	2017 £000
Cash and cash equivalents	<b>3,794</b>	2,598	<b>342</b>	124
Trade and other receivables	<b>6,388</b>	8,643	<b>11,528</b>	12,472
	<b>10,182</b>	11,241	<b>11,870</b>	12,596

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

	Group		Company	
	2018 £000	2017 £000	2018 £000	2017 £000
Barclays Bank plc	<b>2,760</b>	1,800	<b>342</b>	124
Bank of America Corporation	<b>447</b>	719	-	-
China CITIC Bank International Limited	<b>87</b>	58	-	-
Skandinaviska Enskilda Banken AB	<b>500</b>	21	-	-
	<b>3,794</b>	2,598	<b>342</b>	124

# Notes to the financial statements continued

## for the year ended 31 May 2018

### 36 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:

	<b>Group</b>	
	<b>2018</b>	2017
	<b>£000</b>	£000
Customer one	<b>1,541</b>	6,070
Customer two	<b>1,337</b>	524
Customer three	<b>1,080</b>	448
Other customers	<b>1,778</b>	1,037
	<b>5,736</b>	8,079

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

	<b>Group</b>	
	<b>2018</b>	2017
	<b>£000</b>	£000
Not past due	<b>5,726</b>	7,651
Past due less than three months	<b>2</b>	405
Past due more than three months	<b>8</b>	23
	<b>5,736</b>	8,079

No trade receivables have been provided for in either FY2018 or FY2017.

#### Interest rate risk

Cash is generally held on short-term bank deposits which earns interest at variable money market deposit rates. At 31 May 2018, 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:

	<b>Expected annual interest income £000</b>	Expected annual interest costs £000
1.5%	<b>15</b>	(15)
1.0%	<b>10</b>	(10)
0.5%	<b>5</b>	(5)

## 36 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							
	2018				2017			
	SEK £000	EUR £000	RMB £000	USD £000	SEK £000	EUR £000	RMB £000	USD £000
Cash and cash equivalents	505	8	87	1,823	17	1	49	1,945
Trade receivables	-	-	568	3,833	-	10	796	7,237
Trade payables	(35)	(222)	(524)	(2,299)	(45)	(60)	(555)	(4,825)
Net exposure	470	(214)	131	3,357	(28)	(49)	290	4,357

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 2018, then the Group operating profit would have been £75,000 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 2018, the Group had net cash of £3,577,000 and the Company had a cash balance of £342,000. 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.

# Notes to the financial statements

for the year ended 31 May 2018

## 37 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)

Rob Smith — Chief Executive Officer

Michael Tyerman — Finance Director

Reg Gott — Non-Executive Chairman

Michael Roller — 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

KPMG LLP  
Chartered Accountants  
1 Sovereign Square  
Sovereign Street  
Leeds  
LS1 4DA

## 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 25 October 2018 at the offices of Pinsent Masons, 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](mailto:shareholderenquiries@linkgroup.co.uk).

## Filtronic website

Shareholders are encouraged to visit our website ([www.filtronic.com](http://www.filtronic.com)) which has more information about the Company.