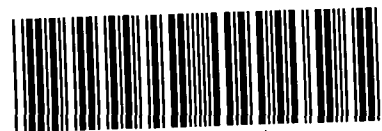


**Toshiba Research Europe Limited**  
**Annual Report and Financial Statements**

for the year ended  
31 March 2019

Registered No. 2519556

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COMPANIES HOUSE

**Directors**

H Otsuka (Chairman)  
S Saito  
O Hori  
Y Sata  
R Cipolla  
T Izuha  
I Seto  
M Sooriyabandara

**Secretary**

M Kaneko

**Independent Auditors**

PricewaterhouseCoopers LLP  
Chartered Accountants and Statutory Auditors  
The Maurice Wilkes Building  
St John's Innovation Park  
Cowley Road  
Cambridge  
CB4 0DS

**Registered office**

208 Cambridge Science Park  
Milton Road  
Cambridge  
CB4 0GZ

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## Strategic report

Registered No. 2519556

### Principal activities and review of the business

The principal activity of the company during the year was research in the field of Quantum Information, Speech, Computer Vision and Signal Processing in Wireless Telecommunications.

Following strategic discussions on research themes of the company with our main customer and ultimate parent company, Toshiba Corporation, all research activities in each division progressed and several significant research results were achieved.

The Cambridge Research Laboratory made the first demonstration of a new long distance protocol called Twin Field QKD. In the efforts to realise the UK's first QKD network, 1.6 years of continuous operation of the Cambridge Quantum Network has been achieved. In the device project, we achieved the first telecom-network distribution of entanglement from remote ELED deployed in the Cambridge network. In the area of speech technology, we have developed distant ASR techniques and achieved a high position in an international competition CHiME-5. One of the developed techniques is unsupervised DNN-supported de-reverberation which eliminates the need for parallel data without any degradation of performance. In the area of computer vision, we developed new algorithms for real-time semantic segmentation called ContextNet and Fast-SCNN which achieved higher accuracy than conventional real-time algorithms.

The Bristol Research and Innovation Laboratory, formerly the Telecommunications Research Laboratory, in Bristol has focused on developing network systems and signal processing in wireless and wired communication technologies. These enable higher communication capacity, higher energy efficiency and enhancing robustness of connection. These technologies will be applied to cellular 5G and advanced non-cellular such as Sub-GHz, Bluetooth and others in infrastructure market. As the other focused area, network protocol technology for IoT (Internet of Things) devices was studied to resolve a network congestion, reliability, latency, reliance on a limited source of energy such as batteries and other challenges. It also engaged in several collaborative projects in the UK and the EU in which many technologies for future Smart Communities were generated. Radio frequency technology for power amplifier and sensing was further studied toward novel wireless market.

In accordance with the research and development program agreement between Toshiba Corporation and the company, all research activities undertaken in the year were reported on schedule to Toshiba Corporation in the form of half year and annual reports.

The company's key financial and other performance indicators during the year were as follows:

	2019	2018
	£	£
Turnover	9,578,212	9,416,500
Operating profit	1,188,494	1,038,630
Profit for the financial year	993,445	1,245,275
Current assets as % of current liabilities	284%	221%
Average number of employees	75	72

## Strategic report (continued)

### Principal activities and review of the business (continued)

The turnover of the company for the year was £9,578,212 compared to the previous year turnover of £9,416,500. This increase was due to a reorganisation of research themes.

Excluding the 'Research and development tax credit' amounting to £769,644, the operating profit for the year is £418,850. This compares to £399,575 profit for the prior year.

### Principal risks and uncertainties

#### a) Dependence on key executives and personnel

The company's success is substantially dependent on retaining and incentivising certain key employees for its research activities. The loss of the services of key personnel could have an adverse impact on the company's business. Such key employees could leave for a variety of reasons, including leaving to work for one of the company's competitors.

#### b) Supply chain

The company has a moderate level of exposure to supply chain disruptions, and reliance on a single source supplier is mitigated by effective supplier selection, sound procurement practices and contingency plans.

### Credit risks

As a result of the research activities being undertaken on behalf of the parent undertaking, the Directors have no reason to believe that the funding will not be provided by Toshiba Corporation in future. The credit risk is thus deemed to be low.

### Cash and liquidity risks

Whilst operating cashflows are not considered to be an issue, the level of cash is impacted by the level of dividends payable to the parent undertaking. In the event, however, that the company requires funds for additional working capital, finance would be made available from within the Toshiba group. To manage its cashflows, the company considers its financial position, existing cash balance, an option to defer payment of previously approved dividends and to generate cash through new share issues.

This report was approved by the board on 4 July 2019 and signed on its behalf.

I Seto

Director



## Directors' Report

The directors present their report which incorporates the strategic report, and the audited financial statements of the company for the year ended 31 March 2019 and up to the date of the approval of this report, unless otherwise indicated.

### Directors

The directors who served the company during the year and up to the date of the approval of this report, unless otherwise indicated, were as follows:

H Otsuka (Chairman)  
S Saito  
O Hori  
Y Sata (appointed 1 April 2018)  
R Cipolla  
I Craddock (resigned 31 January 2019)  
T Izuha (appointed 1 April 2018)  
I Seto  
M Sooriyabandara (appointed 1 February 2019)

### Results and dividends

The profit for the financial year, after taxation, amounted to £993,445 (2018 - £1,245,275). Included in the profit for the financial year is a credit of £nil (2018 - £423,000) arising following the settlement of pension obligations by a fellow Toshiba Corporation subsidiary. A dividend of £1,245,274.98 (equivalent to £724 per ordinary share) was declared on 24 May 2019 for the year ended 31 March 2018. The directors have not proposed a dividend for year ended 31 March 2019.

### Future developments

The company intends to continue operating in the area of research for the foreseeable future. These research areas as well as the financial risks which the company is facing are detailed in the Strategic report.

### Going concern

The financial statements are prepared on the going concern basis. The company is reliant on funding from its ultimate parent company, Toshiba Corporation ('Toshiba') for its operations. The Directors have assessed the existing cash position at the date of these financial statements, the future cash forecasts and revenue projections in their consideration for going concern. The company undertakes research activities only on behalf of Toshiba and consequently a funding agreement has been signed with Toshiba which supports company's activities for the next financial year. All of these matters have been taken into account by the directors in coming to their conclusions on the preparation of the financial statements on the going concern basis.

### Political and charitable contributions

As part of the company's commitment to the communities in which it operates, contributions totalling £1,300 (2018 : £1,300) were made during the year to local charities and community projects focused primarily on scientific research.

## Directors' Report

### Research and development activities

The company undertakes research projects on behalf of the company's ultimate parent undertaking. Research and development expenditure in the year amounted to £8,227,122 (2018 – £7,338,147).

### Accounting Standard

The company's financial statements have been prepared in compliance with FRS 102 as it applies to the financial statements of the company for the year ended 31 March 2019.

### Statement of directors' responsibilities in respect of the financial statements

The directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulation.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have prepared the financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland", and applicable law). 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 company and of the profit or loss of the company for that period. In preparing the financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- state whether applicable United Kingdom Accounting Standards, comprising FRS 102, have been followed, subject to any material departures disclosed and explained in the financial statements;
- make judgements and accounting estimates that are reasonable and prudent; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

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

The directors are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

In the case of each director in office at the date the Directors' Report is approved:

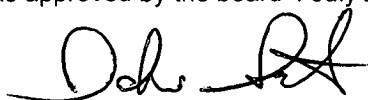
- so far as the director is aware, there is no relevant audit information of which the company's auditors are unaware; and
- they have taken all the steps that they ought to have taken as a director in order to make themselves aware of any relevant audit information and to establish that the company's auditors are aware of that information.

### Directors' indemnities

The company has granted an indemnity to one or more of its directors against liability in respect of proceedings brought by third parties, subject to the conditions set out in the Companies Act 2006. Such qualifying third party indemnity provision was in force for the financial year and remains in force as at the date of approving the directors' report.

This report was approved by the board 4 July 2019 and signed on its behalf.

I Seto  
Director



## **Independent auditors' report**

to the members of Toshiba Research Europe Limited

### **Report on the audit of the financial statements**

#### **Opinion**

In our opinion, Toshiba Research Europe Limited's financial statements:

- give a true and fair view of the state of the company's affairs as at 31 March 2019 and of its profit for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland", and applicable law); and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual Report and Financial Statements (the "Annual Report"), which comprise: the statement of financial position as at 31 March 2019; the income statement, the statement of changes in equity for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

#### **Basis for opinion**

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

#### **Independence**

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

#### **Conclusions relating to going concern**

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

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

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

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

#### **Reporting on other information**

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and,



## **Independent auditors' report**

to the members of Toshiba Research Europe Limited (continued)

### **Reporting on other information (continued)**

accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

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

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

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

### **Strategic Report and Directors' Report**

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

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

### **Responsibilities for the financial statements and the audit**

#### **Responsibilities of the directors for the financial statements**

As explained more fully in the Statement of directors' responsibilities in respect of the financial statements set out on page 7, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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

#### **Auditors' responsibilities for the audit of the financial statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

## Independent auditors' report

to the members of Toshiba Research Europe Limited (continued)

### ***Auditors' responsibilities for the audit of the financial statements (continued)***

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

### ***Use of this report***

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

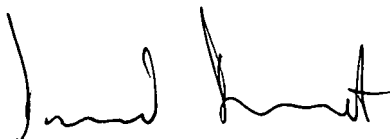
### **Other required reporting**

#### **Companies Act 2006 exception reporting**

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

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

We have no exceptions to report arising from this responsibility.



Daniel Dennett (Senior Statutory Auditor)  
for and on behalf of PricewaterhouseCoopers LLP  
Chartered Accountants and Statutory Auditors  
Cambridge

8 July 2019

## Income Statement

for the year ended 31 March 2019

	Note	2019 £	2018 £
<b>Turnover</b>	2	9,578,212	9,416,500
Administrative expenses - R&D		(8,227,122)	(7,338,147)
- Other		(2,166,731)	(2,084,749)
Other operating income	3	2,004,135	1,045,026
<b>Operating profit</b>	4	1,188,494	1,038,630
Settlement of pension obligation	19	-	423,000
Interest receivable and similar income	6	47,306	89,590
Interest payable and similar expenses	7	-	(10,000)
<b>Profit before taxation</b>		1,235,800	1,541,220
Tax on profit	10	(242,355)	(295,945)
<b>Profit for the financial year</b>		993,445	1,245,275

All amounts relate to continuing operations. The company has no recognised gains or losses other than the results for the years as set out above, and therefore no separate statement of other comprehensive income has been presented.

## Statement of Financial Position

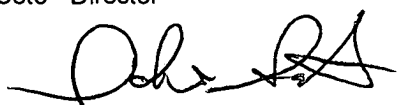
as at 31 March 2019

	Note	2019 £	2018 £
<b>Fixed assets</b>			
Tangible assets	11	335,538	321,809
<b>Current assets</b>			
Debtors	13	5,153,014	4,722,986
Cash at bank and in hand		107,217	159,968
<b>Creditors: amounts falling due within one year</b>	14	5,260,231 (1,851,726)	4,882,954 (2,211,843)
<b>Net current assets</b>		3,408,505	2,671,111
<b>Total assets less current liabilities</b>		3,744,043	2,992,920
<b>Creditors: amounts falling due after more than one year</b>	14	(96,243)	(366,896)
<b>Provisions for liabilities</b>			
Taxation, including deferred taxation	10	(45,638)	(43,056)
Other provisions	15	(331,442)	(305,693)
<b>Net assets</b>		3,270,720	2,277,275
<b>Capital and reserves</b>			
Called up share capital	17	1,032,000	1,032,000
Profit and loss account		2,238,720	1,245,275
<b>Total shareholders' funds</b>		3,270,720	2,277,275

The notes on pages 14 to 32 are an integral part of these financial statements.

The financial statements on pages 11 to 32 were approved by the board of directors on 4 July 2019 and signed on its behalf by

I Seto - Director



## Statement of Changes in Equity

for the year ended 31 March 2019

	<i>Called up share capital</i>	<i>Profit and loss account</i>	<i>Total shareholders funds</i>
	£	£	£
At 1 April 2017	1,032,000	85,009	1,117,009
Profit for the financial year	-	1,245,275	1,245,275
Other comprehensive income	-	-	-
	<hr/>	<hr/>	<hr/>
Total comprehensive income for the year	-	1,245,275	1,245,275
Dividend	-	(85,009)	(85,009)
	<hr/>	<hr/>	<hr/>
At 31 March 2018	1,032,000	1,245,275	2,277,275
	<hr/>	<hr/>	<hr/>
Profit for the financial year	-	993,445	993,445
Other comprehensive income	-	-	-
	<hr/>	<hr/>	<hr/>
Total comprehensive income for the year	-	993,445	993,445
Dividend	-	-	-
	<hr/>	<hr/>	<hr/>
At 31 March 2019	1,032,000	2,238,720	3,270,720
	<hr/>	<hr/>	<hr/>

## Notes to the financial statements

for the year ended 31 March 2018

### 1. Accounting policies

#### **General information**

The principal activity of the company during the year was research in the field of Quantum Information, Speech, Computer Vision and Wireless Telecommunications.

#### **Statement of compliance**

Toshiba Research Europe Limited is a private limited liability company limited by shares and incorporated in England, United Kingdom. The Registered Office is 208 Cambridge Science Park, Milton Road, Cambridge, CB4 0GZ.

The company's financial statements have been prepared in compliance with FRS 102 as it applies to the financial statements of the company for the year ended 31 March 2019.

The entity is a qualifying entity and has taken advantage of the following disclosure exemptions under the FRS 102 reduced disclosure framework:

- (a) The requirements of Section 4 Statement of Financial Position paragraph 4.12(a)(iv).
- (b) The requirements of Section 7 Statement of Cash Flows and Section 3 Financial Statement Presentation paragraph 3.17(d).
- (c) The requirements of Section 11 Basic Financial Instruments paragraph 11.39 to 11.48A.
- (d) The requirements of Section 33 Related Party Transactions paragraph 33.7.
- (e) The requirements of Section 12 Other Financial Instruments Issues paragraph 12.26 to 12.29A.

#### **Basis of preparation and principal accounting policies**

The financial statements have been prepared in accordance with applicable accounting standards, which have been applied consistently throughout the financial year, and the Companies Act 2006. The financial statements are prepared in sterling which is the functional currency of the company and under the historical cost convention.

The financial statements are prepared on the going concern basis. The company is reliant on funding from its ultimate parent company, Toshiba Corporation ('Toshiba') for its operations. The Directors have assessed the existing cash position at the date of these financial statements, the future cash forecasts and revenue projections in their consideration for going concern. The company undertakes research activities only on behalf of Toshiba and consequently a funding agreement has been signed with Toshiba which supports company's activities for the next financial year. All of these matters have been taken into account by the directors in coming to their conclusions on the preparation of the financial statements on the going concern basis.

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 1. Accounting policies (continued)

#### *Judgements and key sources of estimation uncertainty*

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the amounts reported for assets and liabilities as at the balance sheet date and the amounts reported for revenues and expenses during the period. However, the nature of estimation means that actual outcomes could differ from those estimates. The following judgements (apart from those involving estimates) have had the most significant effect on amounts recognised in the financial statements.

#### *a) Tax estimates*

The calculation of the company's total tax charge and research and development tax credit for the year necessarily involves a degree of estimation and judgement in respect of certain items whose tax treatment cannot be finally determined at the reporting date. To the extent that the final outcome differs from the tax that has been provided, adjustments will be made to corporation tax, research and development tax credit and deferred tax provisions. Furthermore, the recognition of deferred tax assets is based upon whether it is more likely than not that sufficient and suitable taxable profits, based on the latest available profit forecasts, will be available in the future against which the reversal of timing differences can be deducted.

#### *b) Post-employment benefits*

The Company had a defined benefit pension scheme in operation until 23 March 2018 when the company was released of its obligations in relation to the scheme.

The defined benefit pension plans and other post-employment medical benefits are determined using actuarial valuations. The actuarial valuation involves making assumptions about discount rates, future salary increases, mortality rates and future pension increases. Due to the complexity of the valuation, the underlying assumptions and the long term nature of these plans, such estimates are subject to significant uncertainty.

Following settlement of the scheme, the Company has no further liabilities in relation to the scheme (2018: £nil). No further income was incurred in relation to the scheme in the year (2018: £423,000).

#### *c) Government Grant*

The company recognises grant income when it is reasonable to expect that the grants will be received. The timing of receipt of grant income is often uncertain and involves a judgement when classifying grant receivable as current or non-current.

#### *Operating lease commitments*

As a lessee the company obtains use of property, plant and equipment. The classification of such leases as operating or finance lease requires the company to determine, based on an evaluation of the terms and conditions of the arrangements, whether it retains or acquires the significant risks and rewards of ownership of these assets and accordingly whether the lease requires an asset and liability to be recognised in the statement of financial position.

#### *Taxation*

The company establishes provisions based on reasonable estimates, for possible consequences of audits by the tax authorities of the respective countries in which it operates. The amount of such provisions is based on various factors, such as experience with previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority.

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 1. Accounting policies (continued)

#### *Taxation (continued)*

Taxation expense for the period comprises current and deferred tax recognised in the reporting period. Tax is recognised in the statement of comprehensive income, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case tax is also recognised in other comprehensive income or directly in equity respectively. Current or deferred taxation assets and liabilities are not discounted.

Current tax is the amount of income tax payable in respect of the taxable profit for the period. Tax is calculated on the basis of tax rates and laws that have been enacted or substantively enacted by the period end.

Deferred tax arises from timing differences that are differences between taxable profits and total comprehensive income as stated in the financial statements. These timing differences arise from the inclusion of income and expenses in tax assessments in periods different from those in which they are recognised in financial statements.

Deferred tax is recognised on all timing differences at the reporting date except for certain exceptions. Unrelieved tax losses and other deferred tax assets are only recognised when it is probable that they will be recovered against the reversal of deferred tax liabilities or other future taxable profits. Deferred tax is measured using tax rates and laws that have been enacted or substantively enacted by the period end and that are expected to apply to the reversal of the timing difference.

#### *Impairment of non-financial assets*

The company assesses at each reporting date whether an asset may be impaired. If any such indication exists the company estimates recoverable amount of the asset. If it is not possible to estimate the recoverable amount of the individual asset, the company estimates the recoverable amount of the cash-generating unit to which the asset belongs. The recoverable amount of an asset or cash-generating unit is the higher of its fair value less costs to sell and its value in use. If the recoverable amount is less than its carrying amount, the carrying amount of the asset is impaired and it is reduced to its recoverable amount through an impairment in the statement of comprehensive income unless the asset is carried at a revalued amount where the impairment loss of a revalued asset is a revaluation decrease.

An impairment loss recognised for all assets is reversed in a subsequent period if and only if the reasons for the impairment loss have ceased to apply.



## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 1. Accounting policies (continued)

#### ***Tangible Assets***

Tangible assets are stated at cost less accumulated depreciation and accumulated impairment losses. Such cost includes costs directly attributable to making the asset capable of operating as intended.

Depreciation is provided on all tangible assets at rates calculated to write off the cost, less estimated residual value, of each asset on a systematic basis over its expected useful life as follows:

- Leasehold property improvements - over the shorter period of the lease term or 2 to 6 years
- Plant and machinery - over 3 to 6 years
- Fixtures and fittings – over 3 years

#### ***Revenue recognition***

Revenue is recognised to the extent that the company obtains the right to consideration in exchange for its performance. Revenue is measured at the fair value of the consideration received, excluding discounts, rebates, VAT and other sales taxes or duty.

The following criteria must also be met before revenue is recognised:

As a fully funded research facility, revenue is recognised on an accruals basis in accordance with the substance of the relevant agreement.

#### ***Research and Development Expenditure***

Research and development expenditure is written off as incurred through the statement of comprehensive income.

#### ***Government grants***

Government grants are recognised when it is reasonable to expect that the grants will be received and that all related conditions will be met. Grants of a revenue nature are credited to the statement of comprehensive income so as to match them with the expenditure to which they relate.

#### ***Provisions for liabilities***

A provision is recognised when the company has a 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.

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 1. Accounting policies (continued)

#### *Post-employment benefits*

On 23 March 2018 the company was released of its obligations in relation to the defined benefit pension scheme.

The cost of defined benefit pension plans and other post-employment medical benefits were determined using actuarial valuations. The actuarial valuation involved making assumptions about discount rates, future salary increases, mortality rates and future pension increases. Due to the complexity of the valuation, the underlying assumptions and the long term nature of these plans, such estimates were subject to significant uncertainty.

Pension scheme assets were measured using fair values. Pension scheme liabilities were measured using a projected unit method and discounted at the current rate of return on a high quality corporate bond of equivalent term to that of the liability.

The company also operates a defined contribution pension scheme. The pension contributions charged to the profit and loss account are those payable in the year.

Further details are given in note 19.

#### *Foreign currencies*

Transactions in foreign currencies are initially recorded in the company's functional currency by applying the spot exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the rate of exchange ruling at the balance sheet date. All differences are taken to the statement of comprehensive income.

#### *Cash and cash equivalents*

Cash and cash equivalents in the balance sheet comprise cash at banks and in hand and short term deposits with an original maturity date of three months or less.

#### *Short-term debtors and creditors*

Debtors and creditors with no stated interest rate and receivable or payable within one year are recorded at transaction price. Any losses arising from impairment are recognised in the income statement in other operating expenses.

#### *Leasing*

Rentals payable under operating leases are charged in the statement of comprehensive income on a straight line basis over the lease term. Lease incentives are recognised over the lease term on a straight line basis.

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 1. Accounting policies (continued)

#### *Financial instruments*

Basic financial assets, including trade and other receivables and cash and bank balances, are initially recognised at transaction price, unless the arrangement constitutes a financing transaction, where the transaction is measured at the present value of the future receipts discounted at a market rate of interest.

Such assets are subsequently carried at amortised cost using the effective interest method.

At the end of each reporting period financial assets measured at amortised cost are assessed for objective evidence of impairment. If an asset is impaired the impairment loss is the difference between the carrying amount and the present value of the estimated cash flows discounted at the asset's original effective interest rate. The impairment loss is recognised in comprehensive income.

If there is a decrease in the impairment loss arising from an event occurring after the impairment was recognised, the impairment is reversed. The reversal is such that the current carrying amount does not exceed what the carrying amount would have been had the impairment not previously been recognised. The impairment reversal is recognised in comprehensive income.

Financial assets are derecognised when (a) the contractual rights to the cash flows from the asset expire or are settled, or (b) substantially all the risks and rewards of the ownership of the asset are transferred to another party, or (c) despite having retained some significant risks and rewards of ownership, control of the asset has been transferred to another party who has the practical ability to unilaterally sell the asset to an unrelated third party without imposing additional restrictions.

#### *Financial liabilities*

Basic financial liabilities, including trade and other payables and other provisions are initially recognised at transaction price, unless the arrangement constitutes a financing transaction, where the debt instrument is measured at the present value of the future receipts discounted at a market rate of interest. Debt instruments are subsequently carried at amortised cost, using the effective interest rate method.

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Accounts payable are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities. Trade payables are recognised initially at transaction price and subsequently measured at amortised cost using the effective interest method. Financial liabilities are derecognised when the liability is extinguished, that is when the contractual obligation is discharged, cancelled or expires.

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 2. Turnover

Turnover represents the amounts derived from the provision of goods and services which fall within the company's ordinary activities, stated net of value added tax.

The whole of the turnover is attributable to the value of fees receivable from Toshiba Corporation (based in Japan) for the provision of continuing research and development activities.

### 3. Other operating income

	2019 £	2018 £
Government grants income	2,004,135	1,045,026

### 4. Operating profit

This is stated after charging/(crediting):	2019 £	2018 £
Research and development expenditure	8,227,122	7,338,147
Depreciation of owned assets	234,562	340,053
Operating lease rentals - Plant and machinery	51,688	56,681
- Other operating leases	494,182	490,668
Auditors' remuneration (note 5)	25,800	26,445
Professional fee relating to tax consultancy	36,000	34,000
Tax credit on research and development expenditure relating to prior year	(34,693)	1,376
Tax credit on research and development expenditure	(769,644)	(640,431)

### 5. Auditors' remuneration

	2019 £	2018 £
Audit of the financial statements	25,800	26,445
Total auditors' remuneration	25,800	26,445

Consultancy services are provided by another professional services firm.

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 6. Interest receivable and similar income

	2019	2018
	£	£
Interest receivable from group companies	46,115	88,327
Other interest receivable	1,191	1,263
	<u>47,306</u>	<u>89,590</u>

### 7. Interest payable and similar expenses

	2019	2018
	£	£
Interest expense on pension scheme liabilities (note 19)	-	10,000
	<u>-</u>	<u>10,000</u>

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 8. Staff costs

	2019	2018
	£	£
Wages and salaries	3,609,212	3,464,326
Social security costs	410,058	404,135
Other pension costs	350,182	344,371
	<u>4,369,452</u>	<u>4,212,832</u>

The average monthly number of employees during the year was made up as follows:

	2019 No.	2018 No.
Administration	10	11
Development	61	57
Directors	4	4
	<u>75</u>	<u>72</u>

### 9. Directors' emoluments

	2019	2018
	£	£
Remuneration	<u>760,929</u>	<u>704,036</u>
Company pension contributions to defined contribution pension schemes	<u>14,403</u>	<u>9,876</u>

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 9. Directors' emoluments (continued)

During the financial year 5 (2018 :4) Directors were remunerated by the company.

During the year retirement benefits were accruing to 3 Directors (2018 - 2) in respect of defined contribution pension schemes.

The highest paid Director received remuneration of £293,877 (2018 - £276,442). No pension contributions were made in respect of this Director, nor did this Director or any other receive any shares in respect of qualifying services or exercise any share options.

S Saito, O Hori, Y Sata and H Otsuka are remunerated by Toshiba Corporation. The Directors do not believe it is practical to apportion their total remuneration between their services to other group undertakings and their services to Toshiba Research Europe Limited and therefore no amounts in respect of their services to Toshiba Research Europe Limited are included in the total directors' remuneration above. Their remuneration is included within the Directors remuneration disclosures in the financial statements of Toshiba Corporation and Toshiba of Europe Limited respectively.

### 10. Tax on profit

#### (a) Tax on profit

The tax charge is made up as follows:

<i>Current tax:</i>	2019	2018
	£	£
UK corporation tax on profits for the year	233,158	240,824
Adjustments in respect of prior periods	6,615	1,998
<b>Total current tax</b>	<b>239,773</b>	<b>242,822</b>
<i>Deferred tax:</i>	2019	2018
	£	£
Origination and reversal of timing differences	2,592	59,599
Effect of changes in tax rates	(10)	(6,476)
<b>Total deferred tax</b>	<b>2,582</b>	<b>53,123</b>
<b>Tax on profit on ordinary activities</b>	<b>242,355</b>	<b>295,945</b>

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 10. Tax on profit (continued)

#### (b) Factors affecting the total tax charge

The tax assessed on the profit for the year is higher than the standard rate of corporation tax in the UK of 19% (2018: 19.00%). The differences are reconciled below:

	2019 £	2018 £
Profit before tax	1,235,800	1,541,220
Profit multiplied by standard rate of corporation tax in the UK of 19% (2018: 19.00%)	234,802	292,832
Expenses not deductible for tax purposes	7,540	7,591
Income not taxable	(6,592)	-
Change in tax rates	(10)	(6,476)
Adjustment in respect of prior periods	6,615	1,998
Total tax charge	242,355	295,945

The standard rate of UK Corporation Tax reduced from 20% to 19% on 1 April 2017 following the substantive enactment of Finance (No.2) Act 2015 on 18 November 2015.

The Spring Budget on 16 March 2016 announced a further reduction in the corporation tax rate to 17% for the Financial Year beginning 1 April 2020. This change was substantively enacted in Finance Act 2016 on 15 September 2016. As these changes were substantively enacted at the balance sheet date deferred tax has been calculated accordingly in these financial statements.



## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 10. Tax on profit (continued)

#### (c) Deferred tax

The deferred tax included in the balance sheet is as follows:

	2019 £	2018 £
Accelerated capital allowances	(50,005)	(49,920)
Short term timing differences	4,367	6,864
Total deferred tax	<u>(45,638)</u>	<u>(43,056)</u>
	2019 £	2018 £
Opening balance as at 1 April 2018	(43,056)	10,067
Deferred tax credit in the income statement	(2,582)	(53,123)
Closing balance as at 31 March 2019	<u>(45,638)</u>	<u>(43,056)</u>

The company expects deferred tax assets of £4,367 to reverse in the year ending 31 March 2020 and the deferred tax liability on accelerated capital allowances to reverse in line with the depreciation policy on tangible fixed assets.

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 11. Tangible assets

	Leasehold property improvements	Plant and machinery	Fixtures and fittings	Total
	£	£	£	£
<b>Cost</b>				
At 1 April 2018	1,427,895	6,343,664	1,629,627	9,401,186
Additions	25,749	109,810	112,732	248,291
Disposals	-	(285,077)	(25,900)	(310,977)
At 31 March 2019	1,453,644	6,168,397	1,716,459	9,338,500
<b>Accumulated Depreciation</b>				
At 1 April 2018	1,369,841	6,183,433	1,526,103	9,079,377
Charge for the year	20,849	125,086	88,627	234,562
Disposals	-	(285,077)	(25,900)	(310,977)
At 31 March 2019	1,390,690	6,023,442	1,588,830	9,002,962
<b>Net Book Value</b>				
At 31 March 2019	62,954	144,955	127,629	335,538
At 31 March 2018	58,054	160,231	103,524	321,809

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 12. Investments

	<i>Unlisted Investments</i> £
<b>Cost</b>	
At 1 April 2018 and 31 March 2019	497,335
<b>Accumulated Impairment</b>	
At 1 April 2018 and 31 March 2019	(497,335)
<b>Net book value</b>	
At 31 March 2018 and 31 March 2019	-

The company's investment of £497,335 in TeraView Limited is unlisted and held at cost less impairment as fair value cannot be reliably determined. The investment consists of convertible 8% loan notes at a cost of £200,000 and ordinary shares of £297,335 which were fully impaired.

### 13. Debtors

	2019 £	2018 £
Amounts owed by group undertakings	2,705,907	3,136,225
Amounts receivable in relation to R&D tax credit	964,172	399,607
Corporation tax receivable	125,000	110,000
Other debtors	114,932	115,430
Prepayments and accrued income	1,243,003	961,724
	<u>5,153,014</u>	<u>4,722,986</u>

The amounts receivable in relation to R&D tax credit relate to a Research & Development Expenditure Credit (RDEC) of £804,337 during the year (2018: £639,055).

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 14. Creditors

#### Creditors: amounts falling due within one year

	2019 £	2018 £
Trade creditors	532,652	311,844
Amounts owed to group undertakings	199,000	-
Taxation and social security	152,600	168,190
Government grants	259,666	419,001
Dividend payable (Note 18)	-	222,053
Deferred income – other*	-	517,000
Accruals and deferred income	707,808	573,755
	<u>1,851,726</u>	<u>2,211,843</u>

#### Creditors: amounts falling due after more than one year

Government grants	3,588	253,261
Accruals and deferred income	92,655	113,635
	<u>96,243</u>	<u>366,896</u>

Included within accruals and deferred income is an accrual for rent free amounts on operating leases in relation to property. £20,979 (2018 - £20,979) is disclosed within amounts falling due within one year and £92,655 (2018 - £113,635) is disclosed within amounts falling due after more than one year of which £8,741 (2018 - £29,720) will be released in more than 5 years.

\*Deferred income - other relates to an upfront payment received in relation to a research contract signed in a previous year and for which work commenced in a previous year.

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 15. Other provisions

	<i>Dilapidation provision</i> £
At 1 April 2018	305,693
Charge in the year	25,749
At 31 March 2019	<u>331,442</u>

#### *Dilapidation provision*

A provision is recognised for expected dilapidation costs on the expiry of the leases held on 208 Cambridge Science Park, Cambridge and 30/32 Queen Square, Bristol. The lease for the Cambridge building expires 24 December 2022 and the lease for the Bristol building expires 31 August 2024 when the provision for dilapidations is anticipated to be incurred.

### 16. Operating lease commitments

The total future minimum lease payments under non-cancellable operating leases are as follows:

	<i>Land and Buildings</i>		<i>Other</i>	
	2019	2018	2019	2018
	£	£	£	£
Operating lease commitment:				
In less than one year	575,616	511,616	27,468	44,307
In two to five years	1,783,714	1,958,714	16,735	123,735
Over five years	53,539	227,539	-	-
	<u>2,412,869</u>	<u>2,697,869</u>	<u>44,203</u>	<u>168,042</u>

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 17. Called up share capital

	2019	2018
	£	£
<i>Authorised, allotted, called up and fully paid:</i>		
1,720 (2018: 1,720) ordinary shares of £600 each	1,032,000	1,032,000

### 18. Dividends

	2019	2018
	£	£
Equity dividends on ordinary shares: £nil (2018: £49) per share	-	85,009

No dividend was proposed to be paid for the financial year ended 31 March 2019. On 24 May 2019 a dividend of £1,245,275 (equivalent to £724 per ordinary share) was declared in respect of the financial year ended 31 March 2018. Given that this dividend was declared subsequent to 31 March 2019 this dividend is not reflected in these financial statements.

### 19. Post employment benefits

The company operates a Defined contribution pension scheme.

The assets of the scheme are held in a separate trustee-administered fund to meet the long-term pension liabilities to past and present employees. The trustees of the plan are required to act in the best interest of the Plan's beneficiaries. The appointment of members of the trustee board is determined by the trust documentation. The pension cost represents contributions payable by the company to these plans and amounted to £350,182 (2018 – £344,371). At the year-end unpaid contributions amounted to £22,972 (2018 – £36,120).

In addition the company also operated a defined benefit pension scheme. This scheme was closed to new entrants and was part of a multi-employer scheme of which the company's share of assets and liabilities were identified and recorded in financial statements. On 23 March 2018 Toshiba Europe GmbH purchased a bulk annuity contract to settle the Scheme's benefits and obligations and as a consequence the share of liability for Toshiba Research Europe Limited was reduced to zero. The liability of £nil (2018 - £423,000) was released in the income statement upon settlement of the pension obligation.

## Notes to the financial statements (continued)

for the year ended 31 March 2019

### 19. Post employment benefits (continued)

As the company's assets and liabilities of the scheme were settled by Toshiba Europe GmbH, the balance at 31 March 2019 is nil (2018 – nil).

The amounts recognised in the Income Statement for the year are analysed as follows:

	2019	2018
	£	£
<i>Recognised in the Income Statement</i>		
Effect of settlements	-	423,000
Net interest on net defined benefit liability (Note 7)	-	(10,000)
	<u>          </u>	<u>          </u>
Total recognised in the income statement	-	413,000
	<u>          </u>	<u>          </u>

### 20. Capital commitments

Amounts contracted for but not provided in the financial statements amount to £nil (2018 - £nil).

### 21. Related party transactions

During the year the company entered into transactions, in the ordinary course of business, with other related parties.

During the year the company received charges for services and recharged costs from the University of Bristol where I Craddock is a Professor at the Department of Electrical and Electronic Engineering. Charges consisted of sponsorship totalling £173,854 (2018 – £56,945); recharged costs £75,813 (2018 – £62,432) and provision of research services £15,963 (2018 – £24,973), £nil (2018 – £nil) remains outstanding at the year end.

During the year the company received charges for services and purchases from the University of Cambridge where R Cipolla is a Professor at the Department of Engineering. Charges consisted of sponsorship totalling £455,478 (2018 – £436,225 ) and purchases totalling £43,832 (2018 - £31,493). £268,329 (2018 – £314,138) remains outstanding at the year end.

#### *Key management personnel*

The entity is a qualifying entity and has taken advantage of the exemption from disclosing key management compensation under FRS 102 (section 1.12).

## **Notes to the financial statements (continued)**

for the year ended 31 March 2019

### **22. Ultimate parent company**

The immediate parent company of Toshiba Research Europe Limited is Toshiba of Europe Limited. The smallest and largest group in which the results of Toshiba Research Europe Limited are consolidated is that headed by Toshiba Corporation. Publically available consolidated financial statements may be obtained from Toshiba of Europe Limited, 1st Floor, 3 Furzeground Way, Stockley Park, Uxbridge, Middlesex UB11 1EZ.

The directors of Toshiba Research Europe Limited consider Toshiba Corporation to be the ultimate controlling party.