ICON

# Innovative Solutions for Clinical Development

ICON plc and Subsidiaries

## Annual Report 2016

Registered number 145835

# Directors' Report and Consolidated Financial Statements

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# Directors' and Other Information

| | |
|---|---|
| **Directors** | Ciaran Murray (Irish – Executive Chairman)<br>Dr. Steve Cutler (Australian – Chief Executive Officer)<br>Prof. Hugh Brady (Irish – Non-Executive)<br>Dr. John Climax (Irish – Non-Executive)<br>Prof. William Hall (Irish – Non-Executive)<br>Prof. Dermot Kelleher (Irish – Non-Executive)<br>Dr. Ronan Lambe (Irish – Non-Executive)<br>Declan McKeon (Irish – Non-Executive)<br>Ronan Murphy (Irish – Non-Executive)<br>Mary Pendergast (American – Non-Executive) |
| **Company secretary** | Diarmaid Cunningham |
| **Registered office** | South County Business Park<br>Leopardstown<br>Dublin 18 |
| **Auditor** | KPMG<br>Chartered Accountants<br>1 Stokes Place<br>St. Stephen's Green<br>Dublin 2 |
| **Solicitors** | A & L Goodbody<br>International Financial Services Centre<br>North Wall Quay<br>Dublin 1<br><br>Cahill Gordon Reindel LLP<br>80 Pine Street<br>NY 10005<br>USA |
| **Registrars** | Computershare Investor Services (Ireland) Limited<br>Herron House<br>Corrig Road<br>Sandyford Industrial Estate<br>Dublin 18 |
| **Bankers** | Citibank<br>Canada Square Canary Wharf<br>London E14 5LB<br>United Kingdom<br><br>JP Morgan Chase Bank N.A.<br>4 New York Plaza<br>New York<br>NY 10004<br>USA |

# Directors' Report

The Directors present their report and audited Consolidated and Company financial statements of ICON plc ("the Company" or "ICON"), a public limited company incorporated in the Republic of Ireland, and its subsidiary undertakings ("the Subsidiaries", with the Company and the Subsidiaries being together "the Group") for the year ended 31 December 2016.

The Company's ordinary shares are traded on the NASDAQ market. The Company is considered a foreign private issuer in the US and accordingly it is not subject to the same ongoing regulatory requirements as a US registered company with a primary listing on the NASDAQ market.

These consolidated and Company financial statements (together "the financial statements") for the year ended 31 December 2016 are prepared in accordance with IFRS as adopted by the EU and meet the reporting requirements pursuant to Irish Company Law. In addition to the consolidated financial statements contained in this annual report, we also prepare separate consolidated financial statements on Form 20-F pursuant to the rules and regulations of the U.S. Securities and Exchange Commission ('SEC') and in accordance with accounting principles generally accepted in the United States (U.S. GAAP). The Form 20-F (under U.S. GAAP) is a separate document, a copy of which may be obtained from the Company's website www.iconplc.com. IFRS differs in certain respects from U.S. GAAP, details of which are set out on pages 121 to 124 of this annual report.

### Principal activities, business review and future developments

The Group is a contract research organisation ("CRO"), providing outsourced development services on a global basis to the pharmaceutical, biotechnology and medical device industries. The Group specialises in the strategic development, management and analysis of programmes that support all stages of the clinical development process - from compound selection to Phase I-IV clinical studies. The Group's mission is to accelerate the development of drugs and devices that save lives and improve the quality of life. Our vision is to be the Global CRO partner of choice for the Biopharma industry by delivering best in class information, solutions and performance in clinical and outcomes research.

Headquartered in Dublin, Ireland, the Group began operations in 1990 and has expanded the business predominately through internal growth, together with a number of strategic acquisitions to enhance its capabilities and expertise in certain areas of the clinical development process. Its principal executive office is located at: South County Business Park, Leopardstown, Dublin 18, Republic of Ireland. The contact telephone number of this office is +353 1 291 2000.

The Group believes that it is one of a select number of CROs with the expertise and capability to conduct clinical trials in most major therapeutic areas on a global basis and has the operational flexibility to provide development services on a stand alone basis or as part of an integrated "full service" solution. At 31 December 2016, the Group had approximately 12,500 employees, in 87 locations in 38 countries. During the year ended 31 December 2016, the Group derived approximately 45.8%, 43.4% and 10.8% of its net revenue in the United States, Europe and Rest of World, respectively.

To meet the evolving needs of our clients we continue to enhance our capabilities through both organic service development and targeted acquisitions. During 2016 we established a dedicated global group focused on development services in the growing medical device market. We also continued to enhance our scientific and therapeutic expertise to support our customers in the overall formation of their development strategies for new products. Some examples of the enhancements made during 2016 include the development of CNS Rating Scale Analytics leveraging our ICONIK platform. This is enabling a data-driven approach to rating surveillance that increases the consistency of both Clinicial and Patient Reported Outcomes in CNS studies. We have also grown our global network of investigative sites that have the capabilities and expertise to conduct biosimilar trials and we further strengthened our relationships with specialised Oncology sites whilst also extending our internal oncology expertise within our consulting and project management groups.

# Directors' Report *(continued)*

We also continue to build our positions in emerging markets and have expanded our presence in regions such as Asia-Pacific, in particular in China and Japan, as is evident from recent acquisitions of Niphix, the Japanese subsidiary of Aptiv Solutions and BeijingWits Medical Limited, a leading Chinese CRO. We also added scale and capabilities to our commercialisation and outcomes service offering in the US through the acquisition of Medimedia Pharma Solutions on 27 February 2015.

### *Acquisition activity*

On 15 September 2016, a subsidiary of the Company, ICON US Holdings Inc. acquired Clinical Research Management, Inc. ("ClinicalRM") which resulted in initial net cash outflows of $52.4 million (including certain payments made on behalf of ClinicalRM totalling $9.2 million). Further consideration of up to $12 million is payable if certain performance milestones are met in respect of the periods to December 2017. ClinicalRM is a full-service CRO specialising in preclinical through Phase IV support of clinical research and clinical trial services for biologics, drugs and devices. The organisation helps customers progress their products to market faster, with a wide array of research, regulatory and sponsor services within the U.S. and around the globe. ClinicalRM provide full service and functional research solutions to a broad range of US government agencies and commercial customers. Their extensive expertise extends across basic and applied research, infectious diseases, vaccines development and testing and the response to bio-threats. They have worked in collaboration with government and commercial customers to respond to the threat of global viral epidemics.

On 4 December 2015, Inclinix-PMG Holdings, Inc. ("PMG") was acquired by ICON Clinical Research LLC a subsidiary of the Company, resulting in net cash outflows of $65.4 million. PMG is an integrated network of clinical research sites operating from 12 metropolitan areas throughout the US. PMG conducts clinical trials in all major therapeutic areas with particular experience in cardiology, dermatology, endocrinology, gastroenterology, men's health, neurology, pulmonology, rheumatology, vaccine, and women's health trials. In addition to a proprietary research database of clinical trial participants, PMG also has access to over 2 million active patient lives via electronic health records through their unique partnerships with health care systems and community physician practices.

On 27 February 2015, a subsidiary of the Company; ICON Holdings Unlimited Company (formerly ICON Holdings), acquired 100% of the securities of MMMM/CHC Holding, LLC ("MediMedia Pharma Solutions") from MediMedia USA, Inc. which resulted in net cash outflows of $116.0 million. Headquartered in Yardley, Pennsylvania, MediMedia includes MediMedia Managed Markets and Complete Healthcare Communications. MediMedia Managed Markets is a leading provider of strategic payer-validated market access solutions. Complete Healthcare Communications is one of the leading medical and scientific communication agencies working with medical affairs, commercial and brand development teams within life science companies.

### *Share repurchase programme*

On 3 October 2016, the Company commenced a previously announced share buyback programme of up to $400 million. The Company can acquire up to 10% of its outstanding ordinary shares (by way of redemption), in accordance with Irish law, the United States securities laws and the Company's constitutional documents through open market share acquisitions. At 31 December 2016 a total of 1,429,187 ordinary shares were redeemed by the Company under this buyback programme for a total consideration of $110 million. All ordinary shares that were redeemed under the buyback programme were cancelled in accordance with the constitutional documents of the Company and the nominal value of these shares transferred to other undenominated capital as required under Irish Company Law.

On 1 May 2015, the Company commenced a buyback programme of up to $60 million under which the Company could acquire its outstanding ordinary shares (by way of redemption), in accordance with Irish law, the United States securities laws and the Company's constitutional documents through open market share acquisitions. A total of 882,419 ordinary shares were redeemed by the Company under this buyback programme for a total consideration of $57.9 million. On 31 July 2015, the Company commenced a further buyback programme of up to $400 million under which the Company could acquire its outstanding ordinary shares (by way of redemption), in accordance with Irish law, the United States securities laws and the Company's constitutional documents through open market share acquisitions.

A total of 5,316,062 ordinary shares were redeemed by the Company under this buyback programme for a total consideration of $400 million. The second share buyback programme was completed in December 2015. During the year ended 31 December 2015, the Company redeemed a total of 6,198,481 ordinary shares under these programmes for total consideration of $457.9 million.

***Financing***

On 27 July 2015, the Company entered into a 364 day bridge facility for $350 million with two financial institutions. The facility bore interest at LIBOR plus a margin and included certain guarantees and indemnities in favour of the financial institutions. As of 31 December 2015, the full amount of this facility had been repaid.

On 15 December 2015, the Company issued through its subsidiary ICON Investments Five Unlimited Company (the "Issuer") Senior Notes for aggregate gross proceeds of $350 million through a private placement. The Senior Notes will mature on 15 December 2020. Interest payable is fixed at 3.64% and is payable semi-annually on the Senior Notes on each 15 June and 15 December commencing on 15 June 2016. The Senior Notes are guaranteed by ICON plc, the Senior Notes may be redeemed, at the Issuer's option, at any time prior to maturity, at par plus a make whole premium, together with accrued and unpaid interest, if any, to the redemption date. The terms of the notes are set forth in the Note Purchase and Guarantee Agreement, dated as of 15 December 2015, by and among the Issuer, ICON plc and the purchasers named therein ("Note Purchase and Guarantee Agreement").

The Issuer used the proceeds from the sale of the Senior Notes to repay the existing $350 million bridge facility. The Notes have not been, and will not be, registered under the Securities Act of 1933, as amended, and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements.

The Company entered into an interest rate hedge in respect of the planned issuance of the Senior Notes in December 2015. The interest rate hedge matured in November 2015 when the interest rate on the Senior Notes was fixed. During the year ended 31 December 2015, cash proceeds of $4.6 million representing the realised gain on the interest rate hedge was received on maturity in November 2015 and recorded within Other Comprehensive Income.

***Future developments***

In 2017, the Group looks forward to continuing to expand through organic growth, together with strategic acquisitions to enhance its expertise and capabilities in certain areas of the clinical development process and to continue to deliver on the Company's mission to accelerate the development of drugs and devices that save lives and improve the quality of life.

## Results and dividends

The results for the year are as shown on page 15 of these financial statements. The Directors do not propose the payment of a dividend for the year ended 31 December 2016.

The following table sets forth for the periods indicated certain financial data as a percentage of net revenue and the percentage change in these items compared to the prior period, being the key performance indicators used by management. The trends illustrated in the following table may not be indicative of future results.

| | Year ended 31 December 2016 | Year ended 31 December 2015 | Percentage change in period |
|---|---|---|---|
| | As a percentage of net revenue | | |
| Net revenue | 100% | 100% | 5.8% |
| Direct costs (excluding exceptional items) | 57.7% | 57.7% | 5.8% |
| Other operating expenses (excluding exceptional items) | 23.1% | 24.4% | 0.2% |
| Operating profit (excluding exceptional items) | 19.2% | 17.9% | 13.5% |
| Exceptional items (before taxation) | 0.5% | 0% | 100% |
| Operating profit (including exceptional items) | 18.7% | 17.9% | 10.6% |

### Twelve months ended 31 December 2016 compared to twelve months ended 31 December 2015

Net revenue for the year increased by $91.5 million, or 5.8%, from $1,575.0 million for the year ended 31 December 2015 to $1,666.5 million for the year ended 31 December 2016. For the year ended 31 December 2016 we derived approximately 45.8%, 43.4% and 10.8% of our net revenue in the United States, Europe and Rest of World, respectively.

Direct costs for the year ended 31 December 2016 increased by $52.6 million, or 5.8%, from $909.0 million for the year ended 31 December 2015 to $961.6 million for the year ended 31 December 2016 (excluding exceptional items). Direct costs consist primarily of compensation, associated fringe benefits and share based compensation expense for project-related employees and other direct project driven costs. The increase in direct costs during the period arose due to an increase in headcount and a corresponding increase in personnel related expenditure of $59.5 million combined with an increase in laboratory costs of $4.8 million. These were offset by a decrease in other direct project related costs of $8.2 million and a decrease in travel related costs of $3.8 million. As a percentage of net revenue, direct costs have remained at 57.7% for the year ended 31 December 2015 and for the year ended 31 December 2016.

Other operating expenses for the year ended 31 December 2016 increased by $0.8 million, or 0.2%, from $384.0 million for the year ended 31 December 2015 to $384.8 million for the year ended 31 December 2016 (excluding exceptional items). Other operating costs are primarily comprised of compensation, related fringe benefits, share compensation for non project related employees, recruitment expenses, professional service costs and advertising costs. The movement arose primarily from an increase in personnel related expenditure of $8.3 million, a decrease in facilities and related costs of $2.9 million and a decrease in general and administrative expenses net of foreign exchange movements of $6.5 million. As a percentage of net revenue, other operating expenses, decreased from 24.4% for the year ended 31 December 2015 to 23.1% for the year ended 31 December 2016 (excluding exceptional items).

During the year ended 31 December 2016 a restructuring plan was implemented to improve operating efficiencies resulting in recognition of an exceptional charge of $8.2 million (pre-tax). The restructuring plan includes the cost of resource rationalisations in certain areas of the business to improve utilisation (resulting in a charge of $6.2 million), and office consolidation (resulting in the recognition of an onerous lease obligation of $2.0 million).

Operating profit increased by $29.8 million, or 10.6%, from $282.1 million for the year ended 31 December 2015 to $311.9 million for the year ended 31 December 2016 ($320.1 million, or 13.5% excluding exceptional items). As a percentage of net revenue, income from operations increased from 17.9% of net revenues for year ended 31 December 2015 to 18.7% of net revenues for year ended 31 December 2016 (19.2% excluding exceptional items).

Financing expense for the period increased from $4.0 million for the year ended 31 December 2015 to $13.0 million for the year ended 31 December 2016. This increase primarily reflects the drawdown of the Senior Notes of $350 million issued in December 2015 resulting in a full year's interest expense in 2016. Financing income for the year increased from $1.3 million for the year ended 31 December 2015 to $1.5 million for the year ended 31 December 2016.

Income tax expense for the period decreased to $32.4 million for the year ended 31 December 2016 from $39.4 million for the year ended 31 December 2015. The Company's effective tax rate for the year ended 31 December 2016 was 10.8% (10.8% excluding the effect of exceptional items) compared with 14.1% for the year ended 31 December 2015. The Company's effective tax rate is principally a function of the distribution of pre-tax profits in the territories in which it operates.

### Risks and uncertainties

Under Irish Company Law (Section 327 of the Companies Act 2014 'the Companies Act'), the Directors are required to give a description of the principal risks and uncertainties which it faces. Details of the principal risks and uncertainties facing the Group are set out in Appendix A of this annual report and form an integral part of the Directors' Report.

### Financial risk management

Group financial risk management is governed by policies and guidelines which are reviewed and approved annually by the Board of Directors. These policies and guidelines primarily cover foreign exchange risk, credit risk, liquidity risk and interest rate risk. The principal objective of these policies and guidelines is the minimisation of financial risk at reasonable cost. The Group's financial instruments comprise cash and cash equivalents, current asset investments, finance lease obligations and negotiated debt facilities. The main purpose of these financial instruments is to fund the working capital requirements of the Group, the cost of new acquisitions and continued growth. The principal financial risks facing the Group include currency rate risk, interest rate risk, credit risk and liquidity risk. Further details of which are set out in note 26 to the Consolidated financial statements and note 11 to the Company financial statements. The Group does not undertake any trading activity in financial instruments nor does it enter into any leveraged derivative transactions. The Group treasury function centrally manages the Group's funding and liquidity requirements.

The Group maintains a strong balance sheet. The Group maintains both committed and uncommitted credit lines with its relationship banks. On 15 December 2015, the Group entered into a Note Purchase Agreement in respect of an aggregate gross proceeds of $350 million. The interest rate on the Senior Notes was fixed at 3.64%. The Group entered into an interest rate hedge in anticipation of the drawdown of the Senior Notes the proceeds of which were received in November 2015. This interest rate hedge qualified for hedge accounting under IAS 39. The gain on the hedge is being amortised in the Income Statement over the term of the Senior Notes, resulting in an offset to the interest payable cost on the notes. The effective rate on our 5 year Senior Notes is fixed at 3.37%.

### Subsequent events

Details of subsequent events are set out in note 31 to the financial statements.

### Directors and Secretary

The members of the Board of Directors during the year are included in note 9 to the Consolidated financial statements.

Mr. Ronan Murphy was appointed as a Director of the Company on 18 October 2016. Mr. Thomas Lynch retired as Chairman of the Board on 31 March 2016 and retired as a Director of the Board on 22 July 2016.

The following table sets forth information concerning the composition of the Company's Board committees as of 31 December 2016:

| Name | Position |
|---|---|
| Ciaran Murray (1)(5) | Chief Executive Officer, Director and Executive Chairman designate |
| Dr. Steve Cutler (1) | Chief Operating Officer, Director and Chief Executive Officer designate |
| Professor Hugh Brady | Director |
| Dr. John Climax (6) | Director |
| Professor William Hall (2)(3)(4)(6) | Director |
| Professor Dermot Kelleher (3)(6) | Director |
| Dr. Ronan Lambe (6) | Director |
| Declan McKeon (2)(3)(4)(5) | Director and Acting Chairman |
| Ronan Murphy (2)(3)(4) | Director |
| Mary Pendergast (2)(6) | Director |

*(1) Executive Officer of the Company.*

*(2) Member of Compensation and Organisation Committee.*

*(3) Member of Audit Committee.*

*(4) Member of Nominating and Governance Committee.*

*(5) Member of Execution Committee.*

*(6) Member of Quality Committee.*

# Directors’ Report *(continued)*

Details required by Companies Act 2014, section 329, of Directors’ interests in the Group’s shares are set out in note 9 to the financial statements. Mr Tom Lynch resigned as a Director on 22 July 2016. Mr Ronan Murphy was appointed to the Board on 18 October 2016. All other Directors served for the entire year.

### Directors’ remuneration

Details of the Directors’ remuneration and interests are set out in note 3 and 9 to the Consolidated financial statements.

### Directors’ power to purchase and allot company shares

Subject to the provisions of the Companies Act 2014, the Company may purchase any of its own shares. Every contract for the purchase of shares, or under which the Company may become entitled or obliged to purchase shares in the Company shall be authorised by a special resolution of the Company. The Company may cancel any shares so purchased or may hold them as treasury shares or re-issue them.

On 3 October 2016, the Company commenced a previously announced share buyback programme of up to $400 million. The Company can acquire up to 10% of its outstanding ordinary shares (by way of redemption), in accordance with Irish law, the United States securities laws and the Company’s constitutional documents through open market share acquisitions.

On 1 May 2015 the Company commenced a buyback programme of up to $60 million under which the Company could acquire its outstanding ordinary shares (by way of redemption), in accordance with Irish law, the United States securities laws and the Company’s constitutional documents through open market share acquisitions. On 31 July 2015 the Company commenced a further buyback programme of up to $400 million under which the Company could acquire its outstanding ordinary shares (by way of redemption), in accordance with Irish law, the United States securities laws and the Company’s constitutional documents through open market share acquisitions.

On 19 September 2014 the Company announced that it had completed a $40 million redemption of the Company’s ordinary shares and that it had entered into a further programme under which the Company can acquire up to an additional $100 million of its outstanding ordinary shares (by way of redemption), in accordance with United States securities laws through open market share acquisitions.

Further details of the above share repurchase programmes can be found in note 24 to the financial statements.

### Rights and Obligations attaching to the Company’s shares

The authorised share capital of the Company is €6,000,000 divided into 100,000,000 ordinary shares of €0.06 at 31 December 2016. Holders of ordinary shares will be entitled to receive such dividends as may be recommended by the Board of Directors of the Company and approved by the shareholders and/or such interim dividends as the Board of Directors of the Company may decide. On liquidation or a winding up of the Company, the par value of the ordinary shares will be repaid out of the assets available for distribution among the holders of the Company’s ordinary shares. Holders of ordinary shares have no conversion or redemption rights. On a show of hands, every holder of an ordinary share present in person or proxy at a general meeting of shareholders shall have one vote with no individual having more than one vote.

### Change of control

Certain of the Group’s customer contracts allow the customer to terminate the contract in the event of a change in control of the Company.

The Group has negotiated a banking facility with a number of financial institutions, details of which are set out in note 23 to the financial statements. This facility requires repayment in the event that the Company becomes controlled by any person or persons acting in concert by whom it was not controlled at the date the facility was entered into.

Furthermore certain Group companies have entered capital grant agreements with the Irish government agency, Enterprise Ireland, whereby the Group covenants that the controlling interest in the Company will not change without Enterprise Ireland's prior written consent, which will not be unreasonably withheld.

Additionally, the Company's share option and restricted share unit plans contain change in control provisions which provide for the acceleration of the vesting and exercisability of outstanding options and awards of restricted share units in the event that a change in control occurs with respect to the Company.

### Corporate Governance

The Company is listed on the NASDAQ Global Select Market. The Company complies with the corporate governance listing requirements under the NASDAQ marketplace rules. NASDAQ may provide exemptions from certain NASDAQ corporate governance standards to a foreign private issuer in certain circumstances provided that the foreign private issuer properly notifies NASDAQ and makes the required disclosure except to the extent that such exemptions would be contrary to United States federal securities laws.

The exemptions that the Company relies on, and the practices the Company adheres to, are as follows:

- The Company is exempt from provisions set forth in NASDAQ Rule 5620(c), which requires each issuer (other than limited partnerships) to provide for a quorum in its by-laws for any meeting of the holders of common stock, which shall in no case be less than 33.33% of the outstanding shares of the issuer's common voting stock. The Company's Articles of Association require that only 3 members be present, in person or by proxy, at a shareholder meeting to constitute a quorum. This quorum requirement is in accordance with Irish law and generally accepted business practices in Ireland.
- The Company is exempt from provisions set forth in NASDAQ Rule 5635(c) which requires (other than for certain specified exceptions) shareholder approval prior to the establishment or material amendment of a stock option or purchase plan or other equity compensation arrangement made or materially amended, pursuant to which stock may be acquired by officers, directors, employees or consultants. Irish law does not require shareholder approval with respect to equity compensation arrangements. Accordingly, the 2013 Employees Restricted Share Unit Plan was adopted by the Board of Directors without shareholder approval.
- The Company is exempt from provisions set forth in NASDAQ Rule 5605(b)(2), which requires independent Directors to hold regularly scheduled meetings at which only independent Directors are present. Irish law does not require independent directors to hold regularly scheduled meetings at which only independent Directors are present. The Company holds regularly scheduled meetings which all of the Directors may attend.

The Company's practices with regard to these requirements are not prohibited by Irish law.

### Audit Committee

The Audit Committee meets a minimum of four times a year. It reviews the quarterly and annual financial statements, the effectiveness of the system of internal control (including the arrangement for the Company's employees to raise concerns in confidence about financial inappropriateness) and recommends the appointment and removal of the external auditors. It monitors the adequacy of internal accounting practices and addresses all issues raised and recommendations made by the external auditors. The Audit Committee pre-approves all audit and non-audit services provided to the Company by its external auditors on a quarterly basis. The Audit Committee, on a case by case basis, may approve additional services not covered by the quarterly pre-approval, as the need for such services arises. The Audit Committee reviews all services which are provided by the external auditor to review the independence and objectivity of the external auditor, taking into consideration relevant professional and regulatory requirements. The Chief Financial Officer, the Head of Internal Audit, the General Counsel and the external auditors normally attend all meetings of the Audit Committee and have direct access to the Committee Chairman at all times.

The Audit Committee currently comprises of the following four independent Directors: Declan McKeon (Chairman), Professor Dermot Kelleher, Professor William Hall, and Ronan Murphy. Thomas Lynch served as a member of the Committee during 2016 until his retirement from the Board on 22 July 2016. Ronan Murphy joined the Committee on 18 October 2016.

## Significant shareholdings

The Company has been notified of the following shareholdings in excess of 3% of the issued share capital of the Company as at 31 December 2016:

| Name | % | Number of Shares |
|---|---|---|
| Neuberger Berman LLC | 6.43 | 3,506,496 |
| Wellington Management Company LLP | 6.42 | 3,502,108 |
| WCM Investment Management | 6.31 | 3,439,710 |
| EARNEST Partners LLC | 6.10 | 3,328,111 |
| All Directors and Officers as a group (1) | 4.69 | 2,559,954 |
| AllianceBernstein LP | 4.45 | 2,428,154 |
| Acadian Asset Management LLC | 4.19 | 2,282,150 |
| Wasatch Advisors Inc | 3.31 | 1,805,776 |
| Boston Partners | 3.02 | 1,644,720 |

*(1) Includes 888,015 ordinary shares issuable upon the exercise of stock options granted by the Company, 80,560 restricted stock units ("RSUs") awarded by the Company to directors, officers and other key employees and 540,670 performance share units ("PSUs") awarded by the Company to Directors, officers and other key employees. Of the issued PSUs, performance conditions will determine how many of them vest and, if performance targets are exceeded, additional PSUs will be issued and vest in accordance with the terms of the relevant PSU award.*

## Subsidiary undertakings

The information required by the Companies Act in relation to subsidiary undertakings is presented in note 32 to the financial statements.

## Political donations

The Group made no disclosable political donations in the period.

## Going concern

The Directors have a reasonable expectation that the Group has adequate resources to continue in operation for the foreseeable future. For this reason, the Group continues to adopt the going concern basis in preparing the financial statements.

## Accounting records

The Directors are responsible for ensuring that adequate accounting records as outlined in Section 281-285 of the Companies Act, are kept by the Company. The Directors are also responsible for the preparation of the Annual Report. The Directors have appointed professionally qualified accounting personnel with appropriate expertise and have provided adequate resources to the finance function in order to ensure that those requirements are met. The accounting records of the Company are maintained at the Group's principal executive offices at its registered office at Leopardstown, Dublin 18.

# Directors' Report *(continued)*

### Statement of relevant audit information

The Directors believe that they have taken all steps necessary to make themselves aware of any relevant audit information and have established that the Company's statutory auditors are aware of that information. In so far as they are aware, there is no relevant audit information of which the Company's statutory auditors are unaware.

### Directors' compliance statement

The Directors, in accordance with Section 225(2) of the Companies Act 2014, acknowledge that they are responsible for securing the Company's compliance with its relevant obligations as defined within the Companies Act, 2014 (hereinafter called the relevant obligations).

The Directors confirm that:

- a compliance policy statement has been drawn up setting out the Company's policies with regard to such compliance;
- appropriate arrangements and structures that, in their opinion, are designed to secure material compliance with the Company's relevant obligations, have been put in place; and
- a review has been conducted, during the financial year, of the arrangements and structures that have been put in place to secure the Company's compliance with the relevant obligations.

### Auditor

In accordance with Section 383(2) of the Companies Act 2014, KPMG, Chartered Accountants, will continue in office.

### On behalf of the Board

| Ciaran Murray | Declan McKeon |
|---|---|
| *Executive Chairman* | *Director* |

*25 April, 2017*

# Statement of Directors' Responsibilities in respect of the Directors' report and the financial statements

The Directors are responsible for preparing the Directors' Report and the financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Under that law they have elected to prepare the Group and Company financial statements in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and applicable law.

Under Company law the Directors must not approve the Group and Company financial statements unless they are satisfied that they give a true and fair view of the assets, liabilities and financial position of the Group and Company and of the Group's profit or loss for that year. In preparing each of the Group and Company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether they have been prepared in accordance with IFRS as adopted by the EU; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and Company will continue in business.

The Directors are responsible for keeping adequate accounting records which disclose with reasonable accuracy at any time the assets, liabilities, financial position and profit or loss of the Company and which enable them to ensure that the financial statements of the Group are prepared in accordance with applicable IFRS, as adopted by the EU and comply with the provisions of the Companies Act 2014. They have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and the Company and to prevent and detect fraud and other irregularities. The Directors are also responsible for preparing a Directors' Report that complies with the requirements of the Companies Act 2014.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in the Republic of Ireland governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

**On behalf of the Board**

Ciaran Murray
*Executive Chairman*

Declan McKeon
*Director*

# Independent Auditor’s Report to the members of ICON plc

We have audited the Group and Company financial statements (“financial statements”) of ICON plc for the year ended 31 December 2016 which comprise the Consolidated Income Statement, the Consolidated Statement of Comprehensive Income, the Consolidated and Company Statements of Financial Position, the Consolidated and Company Statements of Cash Flows, the Consolidated and Company Statements of Changes in Equity and the related notes. The financial reporting framework that has been applied in their preparation is Irish law and International Financial Reporting Standards (IFRS) as adopted by the European Union, and, as regards the Company financial statements, as applied in accordance with the provisions of the Companies Act 2014. Our audit was conducted in accordance with International Standards on Auditing (ISAs) (UK & Ireland).

## Opinions and conclusions arising from our audit

### *1 Our opinion on the financial statements is unmodified*

In our opinion:

- the Group financial statements give a true and fair view of the assets, liabilities and financial position of the Group as at 31 December 2016 and of its profit for the year then ended;
- the Company statement of financial position gives a true and fair view of the assets, liabilities and financial position of the Company as at 31 December 2016;
- the Group financial statements have been properly prepared in accordance with IFRS as adopted by the European Union;
- the Company financial statements have been properly prepared in accordance with IFRS as adopted by the European Union, as applied in accordance with the provisions of the Companies Act 2014; and
- the Group financial statements and Company financial statements have been properly prepared in accordance with the requirements of the Companies Act 2014.

### *2 Our conclusions on other matters on which we are required to report by the Companies Act 2014 are set out below*

We have obtained all the information and explanations which we consider necessary for the purposes of our audit.

In our opinion the accounting records of the Company were sufficient to permit the financial statements to be readily and properly audited and the financial statements are in agreement with the accounting records.

In our opinion the information given in the Directors’ Report is consistent with the financial statements.

### *3 We have nothing to report in respect of matters on which we are required to report by exception*

ISAs (UK & Ireland) require that we report to you if, based on the knowledge we acquired during our audit, we have identified information in the annual report that contains a material inconsistency with either that knowledge or the financial statements, a material misstatement of fact, or that is otherwise misleading.

In addition, the Companies Act 2014 requires us to report to you if, in our opinion, the disclosures of directors’ remuneration and transactions required by sections 305 to 312 of the Act are not made.

# Independent Auditor's Report to the members of ICON plc *(continued)*

### Basis of our report, responsibilities and restrictions on use

As explained more fully in the Statement of Directors' Responsibilities set out on page 12, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view and otherwise comply with the Companies Act 2014. Our responsibility is to audit and express an opinion on the financial statements in accordance with Irish law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Financial Reporting Council's Ethical Standards for Auditors.

An audit undertaken in accordance with ISAs (UK & Ireland) involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Group and Company's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the directors; and the overall presentation of the financial statements.

In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Whilst an audit conducted in accordance with ISAs (UK & Ireland) is designed to provide reasonable assurance of identifying material misstatements or omissions it is not guaranteed to do so. Rather the auditor plans the audit to determine the extent of testing needed to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements does not exceed materiality for the financial statements as a whole. This testing requires us to conduct significant audit work on a broad range of assets, liabilities, income and expense as well as devoting significant time of the most experienced members of the audit team, in particular the engagement partner responsible for the audit, to subjective areas of the accounting and reporting.

Our report is made solely to the Company's members, as a body, in accordance with section 391 of the Companies Act 2014. 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.

*Emer McGrath*
***For and on behalf of***
***KPMG***
***Chartered Accountants, Statutory Audit Firm***
*25 April 2017*
*1 Stokes Place*
*St. Stephen's Green*
*Dublin 2*
*Ireland*

# Consolidated Statement of Profit and Loss

*for the year ended 31 December 2016*

| Continuing Operations | Note | 31 December 2016 Excluding Exceptional items $'000 | 31 December 2016 (Note 8) Exceptional items $'000 | 31 December 2016 Including Exceptional items $'000 | 31 December 2015 Excluding Exceptional items $'000 | 31 December 2015 Exceptional items $'000 | 31 December 2015 Including Exceptional items $'000 |
|---|---|---|---|---|---|---|---|
| **Gross revenue** | | **2,364,956** | **-** | **2,364,956** | 2,161,618 | - | 2,161,618 |
| Reimbursable expenses | | **(698,469)** | **-** | **(698,469)** | (586,640) | - | (586,640) |
| **Net revenue** | 2 | **1,666,487** | **-** | **1,666,487** | 1,574,978 | - | 1,574,978 |
| Direct costs | | **(961,641)** | **(2,273)** | **(963,914)** | (908,907) | - | (908,907) |
| Other operating expenses | | **(384,774)** | **(5,886)** | **(390,660)** | (383,951) | - | (383,951) |
| **Operating profit** | | **320,072** | **(8,159)** | **311,913** | 282,120 | - | 282,120 |
| Financing income | 4 | **1,484** | **-** | **1,484** | 1,306 | - | 1,306 |
| Financing expense | 5 | **(13,006)** | **-** | **(13,006)** | (3,992) | - | (3,992) |
| **Profit before taxation** | 3 | **308,550** | **-** | **300,391** | 279,434 | - | 279,434 |
| Income tax expense | 6 | **(33,451)** | **1,020** | **(32,431)** | (39,410) | - | (39,410) |
| **Profit for the financial year** | | **275,099** | **(7,139)** | **267,960** | 240,024 | - | 240,024 |
| **Attributable to:** | | | | | | | |
| Owners of the Company | 25 | **275,099** | **(7,139)** | **267,960** | 240,024 | - | 240,024 |
| **Earnings per ordinary share** | | | | | | | |
| Basic | 7 | **-** | **-** | **4.85** | - | - | 4.09 |
| Diluted | 7 | **-** | **-** | **4.74** | - | - | 3.95 |

**On behalf of the Board**

Ciaran Murray
*Executive Chairman*

Declan McKeon
*Director*

# Consolidated Statement of Comprehensive Income

*for the year ended 31 December 2016*

| | Note | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|---|
| **Other Comprehensive Income** | | | |
| **Items that will not be reclassified to profit or loss:** | | | |
| Re-measurement of post-employment benefit obligations | *10* | **(2,675)** | 2,236 |
| **Total items that will not be reclassified to profit or loss** | | **(2,675)** | 2,236 |
| **Items that are or may be reclassified subsequently to profit or loss net of tax:** | | | |
| Currency translation differences | *25* | **(12,839)** | (35,105) |
| Currency impact on long-term intercompany funding | *25* | **(8,824)** | 7,342 |
| Tax on currency impact on long-term funding | *25* | **396** | (3,574) |
| Unrealised capital gain/(loss) on investments | *25* | **11** | (54) |
| Amortisation of interest rate hedge | *25* | **(923)** | - |
| Gain on interest rate hedge | *25* | **-** | 4,617 |
| **Total items that are or may be reclassified to profit or loss** | | **(22,179)** | (26,774) |
| Other comprehensive loss for the year, net of tax | | **(24,854)** | (24,538) |
| Profit for the financial year | | **267,960** | 240,024 |
| Total comprehensive income for the financial year | | **243,106** | 215,486 |
| **Attributable to:** | | | |
| Equity holders of the Company | | **243,106** | 215,486 |
| **Total comprehensive income for the financial year** | | **243,106** | 215,486 |

**On behalf of the Board**

Ciaran Murray
*Executive Chairman*

Declan McKeon
*Director*

# Consolidated Statement of Financial Position

*as at 31 December 2016*

| ASSETS | Note | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|---|
| **Non-current assets** | | | |
| Property, plant and equipment | *12* | **93,482** | 98,389 |
| Intangible assets – goodwill and other | *13* | **742,192** | 720,399 |
| Other non-current assets | *17* | **20,054** | 17,049 |
| Deferred tax assets | *6* | **37,985** | 46,768 |
| **Total non-current assets** | | **893,713** | 882,605 |
| | | | |
| **Current assets** | | | |
| Inventories | *15* | **2,419** | 1,820 |
| Accounts receivable | *16* | **416,229** | 409,165 |
| Unbilled revenue | | **192,687** | 173,649 |
| Other current assets | *17* | **58,562** | 59,780 |
| Current taxes receivable | | **33,939** | 34,323 |
| Current asset investments | *18* | **68,046** | 85,990 |
| Cash and cash equivalents | *19* | **192,541** | 103,911 |
| **Total current assets** | | **964,423** | 868,638 |
| | | | |
| **Total assets** | | **1,858,136** | 1,751,243 |
| | | | |
| **EQUITY** | | | |
| Share capital | *24* | **4,692** | 4,719 |
| Share premium | | **252,977** | 242,864 |
| Share based payment reserve | *25* | **141,890** | 108,397 |
| Other undenominated capital | *25* | **809** | 715 |
| Other reserves | *25* | **10,348** | 11,340 |
| Foreign currency translation reserve | *25* | **(83,809)** | (62,542) |
| Current asset investment - fair value reserve | *25* | **(23)** | (34) |
| Retained earnings | *25* | **650,583** | 491,671 |
| **Total equity attributable to the owners of the company** | | **977,467** | 797,130 |
| | | | |
| **LIABILITIES** | | | |
| **Non-current liabilities** | | | |
| Non-current bank credit lines and loan facilities | *23* | **348,511** | 348,304 |
| Non-current other liabilities | *20* | **18,639** | 13,183 |
| Non-current provisions | *21* | **7,083** | 1,518 |
| Deferred tax liabilities | *6* | **4,631** | 4,643 |
| **Total non-current liabilities** | | **378,864** | 367,648 |
| | | | |
| **Current liabilities** | | | |
| Accounts payable | | **8,696** | 7,023 |
| Payments on account | | **272,757** | 318,697 |
| Accrued and other liabilities | *20* | **188,295** | 229,764 |
| Provisions | *21* | **1,349** | 598 |
| Current tax payable | | **30,708** | 30,383 |
| **Total current liabilities** | | **501,805** | 586,465 |
| | | | |
| **Total liabilities** | | **880,669** | 954,113 |
| | | | |
| **Total equity and liabilities** | | **1,858,136** | 1,751,243 |

**On behalf of the Board**

| | |
|---|---|
| Ciaran Murray | Declan McKeon |
| *Executive Chairman* | *Director* |

# Consolidated Statement of Changes in Equity

*as at 31 December 2016*

| | Number of shares | Share Capital $'000 | Share Premium $'000 | Other Undenominated Capital $'000 | Share Based Payment Reserve $'000 | Other Reserves $'000 | Currency Reserve $'000 | Current Asset Investment Fair value Reserve $'000 | Retained Earnings $'000 | Total $'000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Balance at 1 January 2016 | 54,958,912 | 4,719 | 242,864 | 715 | 108,397 | 11,340 | (62,542) | (34) | 491,671 | 797,130 |
| **Total comprehensive income for the year:** | | | | | | | | | | |
| Profit for the year | - | - | - | - | - | - | - | - | 267,960 | 267,960 |
| **Other Comprehensive Income:** | | | | | | | | | | |
| Foreign currency translation | - | - | - | - | - | - | (12,839) | - | - | (12,839) |
| Currency impact on long-term funding | - | - | - | - | - | - | (8,824) | - | - | (8,824) |
| Tax on currency impact of long term funding | - | - | - | - | - | - | 396 | - | - | 396 |
| Unrealised fair value movements on investments | - | - | - | - | - | - | - | 11 | - | 11 |
| Employee benefits | - | - | - | - | - | - | - | - | (2,675) | (2,675) |
| Amortisation of interest rate hedge | - | - | - | - | - | (923) | - | - | - | (923) |
| Total other comprehensive income | - | - | - | - | - | (923) | (21,267) | 11 | (2,675) | (24,854) |
| Total comprehensive income for the year | - | - | - | - | - | (923) | (21,267) | 11 | 265,285 | 243,106 |
| **Transactions with owners, recorded directly in equity** | | | | | | | | | | |
| Share-based payment | - | - | - | - | 40,310 | - | - | - | - | 40,310 |
| Exercise of share options | 393,240 | 26 | 10,113 | - | - | - | - | - | - | 10,139 |
| Transfer of exercised and expired share–based awards | - | - | - | - | (3,850) | - | - | - | 3,850 | - |
| Issue of Restricted Share Units | 607,878 | 41 | - | - | - | - | - | - | - | 41 |
| Share issue costs | - | - | - | - | - | - | - | - | (17) | (17) |
| Repurchase of ordinary shares | (1,429,187) | (94) | - | 94 | - | - | - | - | (110,000) | (110,000) |
| Share repurchase costs | - | - | - | - | - | - | - | - | (275) | (275) |
| Tax benefit excess on exercise of options | - | - | - | - | 6,403 | - | - | - | - | 6,403 |
| Deferred tax movement on unexercised options | - | - | - | - | (9,370) | - | - | - | - | (9,370) |
| Non-distributable reserves | - | - | - | - | - | (69) | - | - | 69 | - |
| Total contributions by and distributions to owners | (428,069) | (27) | 10,113 | 94 | 33,493 | (69) | - | - | (106,373) | (62,769) |
| Total transactions with owners | (428,069) | (27) | 10,113 | 94 | 33,493 | (69) | - | - | (106,373) | (62,769) |
| **Balance at 31 December 2016** | **54,530,843** | **4,692** | **252,977** | **809** | **141,890** | **10,348** | **(83,809)** | **(23)** | **650,583** | **977,467** |

# Consolidated Statement of Changes in Equity

*as at 31 December 2015*

| | Number of shares | Share Capital $'000 | Share Premium $'000 | Other Undenominated Capital $'000 | Share Based Payment Reserve $'000 | Other Reserves $'000 | Currency Reserve $'000 | Current Asset Investment Fair value Reserve $'000 | Retained Earnings $'000 | Total $'000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Balance at 1 January 2015 | 60,106,780 | 5,059 | 221,943 | 305 | 70,178 | 6,741 | (31,205) | 20 | 700,154 | 973,195 |
| **Total comprehensive income for the year:** | | | | | | | | | | |
| Profit for the year | - | - | - | - | - | - | - | - | 240,024 | 240,024 |
| **Other Comprehensive Income:** | | | | | | | | | | |
| Foreign currency translation | - | - | - | - | - | - | (35,105) | - | - | (35,105) |
| Currency impact on long-term funding | - | - | - | - | - | - | 7,342 | - | - | 7,342 |
| Tax on currency impact of long term funding | - | - | - | - | - | - | (3,574) | - | - | (3,574) |
| Unrealised fair value movements on investments | - | - | - | - | - | - | - | (54) | - | (54) |
| Employee benefits | - | - | - | - | - | - | - | - | 2,236 | 2,236 |
| Gain on interest rate hedge | - | - | - | - | - | 4,617 | - | - | - | 4,617 |
| Total other comprehensive income | - | - | - | - | - | 4,617 | (31,337) | (54) | 2,236 | (24,538) |
| Total comprehensive income for the year | - | - | - | - | - | 4,617 | (31,337) | (54) | 242,260 | 215,486 |
| **Transactions with owners, recorded directly in equity** | | | | | | | | | | |
| Share-based payment | - | - | - | - | 33,187 | - | - | - | - | 33,187 |
| Exercise of share options | 773,753 | 52 | 20,929 | - | - | - | - | - | - | 20,981 |
| Transfer of exercised and expired share–based awards | - | - | - | - | (8,020) | - | - | - | 8,020 | - |
| Issue of Restricted Share Units | 276,860 | 18 | - | - | - | - | - | - | - | 18 |
| Share issue costs | - | - | (8) | - | - | - | - | - | - | (8) |
| Repurchase of ordinary shares | (6,198,481) | (410) | - | 410 | - | - | - | - | (457,892) | (457,892) |
| Share repurchase costs | - | - | - | - | - | - | - | - | (889) | (889) |
| Tax benefit excess on exercise of options | - | - | - | - | 1,905 | - | - | - | - | 1,905 |
| Deferred tax movement on unexercised options | - | - | - | - | 11,147 | - | - | - | - | 11,147 |
| Non-distributable reserves | - | - | - | - | - | (18) | - | - | 18 | - |
| Total contributions by and distributions to owners | (5,147,868) | (340) | 20,921 | 410 | 38,219 | (18) | - | - | (450,743) | (391,551) |
| Total transactions with owners | (5,147,868) | (340) | 20,921 | 410 | 38,219 | (18) | - | - | (450,743) | (391,551) |
| **Balance at 31 December 2015** | **54,958,912** | **4,719** | **242,864** | **715** | **108,397** | **11,340** | **(62,542)** | **(34)** | **491,671** | **797,130** |

*Further details of the reserves above are detailed in note 25*

# Consolidated Statement of Cash Flows

*for the year ended 31 December 2016*

| | Note | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|---|
| **Profit for the financial year** | | **267,960** | 240,024 |
| **Adjustments to reconcile net income to net cash generated from operating activities** | | | |
| Loss on disposal of property, plant and equipment | | **151** | 55 |
| Depreciation | *12* | **19,614** | 21,887 |
| Amortisation of intangible assets | *13* | **39,961** | 35,790 |
| Amortisation of grants | *22* | **(44)** | 53 |
| Interest on short term investments | *18* | **(823)** | (571) |
| Realised (gain)/loss on sale of short term investments | *18* | **(50)** | 113 |
| Amortisation of gain on interest rate hedge | | **(923)** | (41) |
| Amortisation of deferred financing costs | | **566** | 22 |
| Share based payment | *11* | **40,310** | 33,187 |
| Financing income | *4* | **(1,484)** | (1,306) |
| Financing expense | *5* | **13,006** | 3,992 |
| Defined benefit pension service costs | *10* | **427** | 480 |
| Defined benefit pension finance costs | *10* | **182** | 328 |
| Defined benefit past service cost | *10* | **(88)** | (17) |
| Defined benefit expenses | *10* | **8** | - |
| Income tax expense | *6* | **32,431** | 39,410 |
| **Operating cash inflow before changes in working capital** | | **411,204** | 373,406 |
| Decrease/(increase) in accounts receivable | | **2,526** | (18,671) |
| Increase in unbilled revenue | | **(16,753)** | (29,281) |
| Decrease/(increase) in other current assets | | **645** | (21,313) |
| Increase in other non current assets | | **(2,157)** | (55) |
| Increase in inventory | | **(599)** | (154) |
| Increase in accounts payable | | **1,175** | 3,124 |
| (Decrease)/increase in payments on account | | **(45,754)** | 34,644 |
| Decrease in accrued and other liabilities and provisions | | **(70,791)** | (52,189) |
| Increase in non current other liabilities and provisions | | **2,683** | 5,833 |
| **Cash provided by operations** | | **282,179** | 295,344 |
| Income taxes paid | | **(10,205)** | (14,829) |
| Employer contribution defined benefit pension scheme | *10* | **(303)** | (308) |
| Interest received | | **1,147** | 1,041 |
| Interest paid | | **(13,615)** | (2,175) |
| **Net cash inflow from operating activities** | | **259,203** | 279,073 |
| **Investing activities** | | | |
| Purchase of property, plant and equipment | | **(16,957)** | (18,433) |
| Purchase of intangible assets | | **(25,644)** | (31,297) |
| Purchase of subsidiary undertakings | | **(54,209)** | (166,292) |
| Cash acquired with subsidiary undertakings | | **3,168** | 194 |
| Sale/maturity of current asset investments | | **40,858** | 25,708 |
| Purchase of current asset investments | | **(22,030)** | (14,194) |
| **Net cash used in investing activities** | | **(74,814)** | (204,314) |
| **Financing activities** | | | |
| Drawdown of credit lines and facilities | | **73,000** | 851,500 |
| Repayment of credit lines and facilities | | **(73,000)** | (501,500) |
| Tax benefit from the exercise of share options | | **6,403** | 1,905 |
| Proceeds from exercise of share options, RSUs and PSUs | | **10,180** | 20,999 |
| Share issuance costs | | **(17)** | (8) |
| Repurchase of ordinary shares | | **(110,000)** | (457,892) |
| Share repurchase costs | | **(275)** | (889) |
| Proceeds from interest rate hedge | | **-** | 4,658 |
| Repayment of government grant | | **-** | (159) |
| **Net cash used in financing activities** | | **(93,709)** | (81,386) |
| **Net decrease in cash and cash equivalents** | | **90,680** | (6,627) |
| Effect of exchange rate changes | | **(2,050)** | (8,362) |
| Cash and cash equivalents at start of year | | **103,911** | 118,900 |
| **Cash and cash equivalents at end of year** | | **192,541** | 103,911 |

# Notes to Consolidated Financial Statements

*for the year ended 31 December 2016*

## 1. Basis of preparation and statement of accounting policies

### Statement of compliance

The Group financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board ("IASB") as adopted by the European Union ('EU') that are effective for financial year ending 31 December 2016. The Company financial statements have been prepared in accordance with IFRS as adopted by the EU and those parts of the Companies Act 2014 applicable to companies reporting under IFRS. IFRS adopted by the EU differs in certain respects from IFRS issued by the IASB. Reference to the IFRS hereafter refers to IFRS adopted by the EU. A Company that publishes its Group and Company financial statements together, can take advantage of the exemption in Section 504 of the Companies Act 2014 from presenting to its members a Company Income Statement and Company Statement of Comprehensive Income and related notes.

### Basis of preparation

These Group and Company financial statements are presented in U.S. dollars and all values are rounded to the nearest thousand ($'000), except where otherwise indicated. They are prepared on the historical cost basis, except for the measurement at fair value on date of grant of share options, the pension plan assets and available for sale financial assets. Accounting policies are applied consistently with the prior year.

### Key accounting policies which involve significant estimates and judgments

The preparation of consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reported period.

Estimates and judgments are based on historical experience and on other factors that are reasonable under current circumstances. Actual results may differ from these estimates if these assumptions prove to be incorrect or if conditions develop other than as assumed for the purposes of such estimates. The following are the critical areas requiring estimates and judgments by management.

*Revenue Recognition*

Significant management judgments and estimates must be made and used in connection with the recognition of revenue in each accounting period. Material differences in the amount of revenue in any given period may result if these judgments or estimates prove to be incorrect or if management's estimates change on the basis of development of the business or market conditions. To date there have been no material differences arising from these judgments and estimates. Revenue is earned by providing a number of different services to clients. These services include clinical trials management, biometric activities, consulting, imaging, contract staffing, informatics and laboratory services. Revenue for services, as rendered, are recognised only after persuasive evidence of an arrangement exists, the sales price is fixed or determinable, risks and rewards have transferred and collectability is reasonably assured.

Customers are invoiced on completion of specified contractual milestones. This mechanism, which allows the Group to receive payment from customers throughout the duration of the contract, is not reflective of revenue earned. Revenues are recognised over the period from the awarding of the customer's contract to study completion and acceptance. This requires an estimate of the total expected revenue, time inputs, contract costs, profitability and expected duration of the clinical trial. The Group regularly reviews the estimate of total contract time to ensure such estimates remain appropriate taking into account actual contract stage of completion, remaining time to complete and any identified changes to the contract scope. Remaining time to complete depends on the specific contract tasks and the complexity of the contract and can include geographical site selection and initiation, patient enrolment, patient testing and level of results analysis required. While the group may routinely adjust time estimates, the estimates and assumptions have historically been accurate in all material respects.

## 1. Basis of preparation and statement of accounting policies (continued)

**Key accounting policies which involve significant estimates and judgments (continued)**

If the Group does not reasonably estimate the resources required or the scope of the work to be performed, or does not manage its projects properly within the planned cost or satisfy obligations under the contracts, then future results may be significantly and negatively affected.

*Goodwill*

Goodwill is reviewed for impairment annually or more frequently if facts or circumstances warrant such a review. Goodwill is evaluated for impairment by comparing the recoverable amount of the single cash-generating unit to the carrying amount of the single cash-generating unit to which the goodwill relates. If the recoverable amount is less than the carrying amount an impairment charge is determined.

The recoverable amount of the cash-generating unit is determined using a value-in-use computation based upon discounted net present value cash flow projections for the business. The cash flow projections are for a period of five years forward together with a terminal value calculated in accordance with the Gordon's Growth terminal value model. Management's estimates of future cash flows are based upon anticipated growth rates within the CRO industry, expected growth in the Group's market share and past experience. The key assumptions applied in determining expected future cash flows include management's estimate of future profitability, replacement capital expenditure requirements, trade working capital investment needs and tax considerations. The Group's cash flow model is adjusted each year for actual and expected changes in performance.

Use of different estimates or judgments, particularly with respect to expected profitability could result in a material impairment charge. The Group believes reasonable estimates and judgments have been used in assessing the recoverable amounts of its cash-generating units.

*Taxation*

Given the global nature of the business and the multiple taxing jurisdictions in which the Group operates, the determination of the Group's provision for income taxes requires significant judgments and estimates, the ultimate tax outcome of which may not be certain. Although estimates are believed to be reasonable, the final outcome of these matters may be different than those reflected in the historical income tax provisions and accruals. Such differences could have a material effect on the income tax provision and results in the period during which such determination is made.

Deferred tax assets and liabilities are determined using enacted tax rates for the effects of net operating losses and temporary differences between the book and tax bases of assets and liabilities. In assessing the recoverability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realised. The ultimate realisation of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. While management considers the scheduled reversal of deferred tax liabilities, and projected future taxable income in making this assessment, there can be no assurance that these deferred tax assets may be realisable.

In addition, the Group may also be subject to audits in the multiple taxing jurisdictions in which it operates. These audits can involve complex issues which may require an extended period of time for resolution. Management believe that adequate provisions for income taxes have been made in the financial statements.

## 1. Basis of preparation and statement of accounting policies (continued)

### Key accounting policies which involve significant estimates and judgments (continued)

*Business Combinations*

The Group has concluded a number of business combinations in recent years. Business combinations are accounted for using the acquisition method when control is transferred to the Group. The consideration transferred is generally measured at fair value, as are the identifiable assets acquired and liabilities assumed. The fair value of the consideration of a business combination may include a portion which is contingent upon the delivery of certain future events, such as the achievement of a particular revenue or earnings target. Where a business combination agreement provides for such additional consideration, the amount of the estimated consideration is recognised on the acquisition date at fair value. The accounting treatment of any changes to the estimate in subsequent periods will depend on the classification of the contingent consideration. If the contingent consideration is classified as equity it shall not be re-measured and the settlement shall be accounted for within equity. If the contingent consideration is classified as a liability any adjustment will be accounted for through the consolidated income statement.

Significant management judgments and estimates are required in estimating the acquisition date fair value of the additional consideration. Changes in business conditions or the performance of the acquired business could lead to a significant change between our estimate of the acquisition date fair value and amounts payable, which could have a serious impact on our results of operations.

### New and amended standards and interpretations effective for 2016

There are a number of changes to IFRS which became effective for years ending on or before 31 December 2016, however, they either did not have an effect on the Consolidated Financial Statements or they are not currently relevant for the Group.

### New and amended standards and interpretations effective after 2016

The Directors have reviewed recent changes in accounting standards and have set out below details of changes which may have an impact on the Group. All of the items below await E.U. endorsement.

### Financial instruments

IFRS 9, *Financial Instruments* is the standard which will replace IAS 39, *Financial Instruments: Recognition and Measurement*'. It has been completed in a number of phases with the final version issued by the IASB in July 2014. The Standard includes requirements for recognition, measurement, impairment and derecognition of financial instruments, and general hedge accounting. IFRS 9 is effective for accounting periods beginning on or after 1 January 2018, and subject to EU endorsement, the Group will apply IFRS 9 from its effective date. The Group is currently assessing the impact of IFRS 9.

### Revenue recognition

IFRS 15, *Revenue from Contracts with Customers*, replaces IAS 18, *Revenue* and IAS 11, *Construction contracts and related interpretations*. IFRS 15 establishes principles for reporting the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. It specifies how and when revenue should be recognised as well as requiring enhanced disclosures. Revenue is recognised when an identified performance obligation has been met and the customer can direct the use of and obtain substantially all the remaining benefits from a good or service as a result of obtaining control of that good or service. IFRS 15 is effective for annual periods beginning on or after 1 January 2018. The updated standard is effective for us in the first quarter of the year ended 31 December 2018. We are continuing to evaluate a method of transition and are currently evaluating the effect that the updated standard will have on our consolidated financial statements and related disclosures. While we are continuing to assess all potential impacts of the new standard, we currently believe the most significant impact relates to our assessment of measurement of performance and percentage of completion. Under current GAAP, the revenue attributable to performance is determined based on both input and output methods of measurement.

## 1. Basis of preparation and statement of accounting policies (continued)

### Revenue recognition (continued)

Due to the complexity of certain of our contracts, the actual revenue recognition treatment required under the new standard for these arrangements may be dependent on contract-specific terms and vary in some instances. Our preparatory work is also focused on the increased disclosure obligations (including in respect of retrospective revenue and backlog).

### Leases

IFRS 16, *Leases* issued in January 2016 by the IASB replaces IAS 17 *Leases* and related interpretations. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both the lessee and the lessor. For lessees, IFRS 16 eliminates the classification of leases as either operating leases or finance leases and introduces a single lessee accounting model whereby all leases are accounted for as finance leases, with some exemptions. For lessors, IFRS 16 substantially carried forward the accounting requirement in IAS 17. IFRS 16 is effective for annual periods beginning on or after 1 January 2019, and subject to EU endorsement, the Group will apply IFRS 16 from its effective date. We are currently evaluating the effect that the updated standard will have on our consolidated financial statements and related disclosures.

Other changes to IFRS have been issued; however, they are either not expected to have a material effect on the Consolidated Financial Statements or they are not currently relevant for the Group.

### Accounting policies

The following accounting policies have been applied consistently in dealing with items which are considered material in relation to the Group's financial statements.

### Basis of consolidation

The Group financial statements consolidate the financial statements of ICON plc and its subsidiaries. Subsidiaries are consolidated from the date on which control is transferred to the Group and cease to be consolidated from the date on which control is transferred out of the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Financial statements of subsidiaries are prepared for the same reporting year as the Company and where necessary, adjustments are made to the results of subsidiaries to bring their accounting policies into line with those used by the Group. The Group will continue to prepare the individual statutory financial statements of subsidiary companies under GAAP applicable in their country of incorporation but adjustments have been made to the results and financial position of such companies to bring their accounting policies into line with those of the Group.

All inter-company balances and transactions, including unrealised profits arising from inter-group transactions, have been eliminated in full. Unrealised losses are eliminated in the same manner as unrealised gains except to the extent that there is evidence of impairment.

### Foreign currency translation

The presentation currency of the Group and Company is US dollars ($). The functional currency of the Company changed from Euro (€) to US dollars ($) on 1 August 2015. The determination of the USD as the functional currency of the Company reflects consideration of the primary and secondary indicators as set out in IAS 21. The Directors considered in particular the currency in which funds from financing activities are generated (debt and equity) and the currency in which receipts from operating activities are usually retained. This assessment is consistent with the assessment that the functional currencies of the main subsidiary trading entities are USD. The change in functional currency was accounted for prospectively from the date of change. All items were translated using the exchange rate at the date of change and the resulting translated amounts for non-monetary items were recorded at their historical cost from 1 August 2015. The Company financial statements continue to be presented in US dollars. Results and cash flows of non-dollar denominated undertakings are translated into dollars at the actual exchange rates at the transaction dates or average exchange rates for the year where this is a reasonable approximation.

## 1. Basis of preparation and statement of accounting policies (continued)

### Foreign currency translation (continued)

The related statements of financial position are translated at the rates of exchange ruling at the reporting date. Goodwill and fair value adjustments arising on acquisition of a foreign operation are regarded as assets and liabilities of the foreign operation, are expressed in the functional currency of the foreign operation and are recorded at the exchange rate at the date of the transaction, and subsequently retranslated at the applicable closing rates. Adjustments arising on translation of the results of non-dollar undertakings at average rates, and on the restatement of the opening net assets at closing rates, are dealt with in a separate translation reserve within equity.

Transactions in currencies different to the functional currencies of operations are recorded at the rate of exchange ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated into the functional currency at the rate of exchange at the reporting date. All translation differences, with the exception of translation differences on long term intercompany balances in the Consolidated Financial Statements where repayment is not foreseen, are taken to the income statement. Translation differences on long term intercompany balances, in the Consolidated Financial Statements, where repayment is not foreseen are treated as other comprehensive income in the Statement of Comprehensive Income.

The principal exchange rates used for the translation of results, cash flows and statements of financial position into US dollars were as follows:

| | **Average** | | **Year end** | |
|---|---|---|---|---|
| | **Year to 31 December 2016** | Year to 31 December 2015 | **Year to 31 December 2016** | Year to 31 December 2015 |
| Euro 1:$ | **1.1060** | 1.1123 | **1.0517** | 1.0862 |
| Pound Sterling 1:$ | **1.3684** | 1.5307 | **1.2340** | 1.4736 |

On disposal of a foreign operation, accumulated currency translation differences, together with any exchange differences on foreign currency borrowings that provide a hedge of the net investment are recognised in the income statement as part of the overall gain or loss on disposal; the cumulative currency translation differences arising prior to the transition date to IFRS have been set to zero for the purposes of ascertaining the gain or loss on disposal of a foreign operation subsequent to 1 June 2004.

### Property, plant and equipment

Items of property, plant and equipment are stated at cost less accumulated depreciation and any provisions for impairment losses.

Depreciation is calculated to write off the original cost of property, plant and equipment less its estimated residual value over its expected useful life on a straight line basis. Residual values and useful lives of property, plant and equipment are reviewed and adjusted if appropriate at each reporting date. At present it is estimated that all items of property, plant and equipment have no residual value. The estimated useful lives applied in determining the charge to depreciation are as follows:

| **Years** | |
|---|---|
| Buildings | 40 |
| Computer equipment | 2-8 |
| Office furniture and fixtures | 8 |
| Laboratory equipment | 5 |
| Motor vehicles | 5 |

## 1. Basis of preparation and statement of accounting policies (continued)

### Property, plant and equipment (continued)

Leasehold improvements are amortised using the straight-line method over the estimated useful life of the asset or the lease term, whichever is shorter. Assets acquired under finance leases are depreciated over the shorter of their useful economic life and the lease term.

On disposal of property, plant and equipment the cost and related accumulated depreciation and impairments are removed from the financial statements and the net amount, less any proceeds, is taken to the income statement.

The carrying amounts of the Group's property, plant and equipment are reviewed at each reporting date to determine whether there is any indication of impairment. Where such an indication exists an impairment review is carried out. An impairment loss is recognised whenever the carrying amount of an asset or its cash generation unit exceeds its recoverable amount. Impairment losses are recognised in the income statement unless the asset is recorded at a revalued amount in which case it is firstly dealt with through the revaluation reserve with any residual amount being transferred to the income statement.

Subsequent costs are included in an asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the replaced item can be measured reliably. All other repair and maintenance costs are charged to the income statement during the financial period in which they are incurred.

### Leased assets – as lessee

Leases where the lessor retains substantially all the risks and benefits of ownership of the assets are classified as operating leases. Operating lease payments are recognised as an expense in the income statement on a straight line basis over the lease term. Lease incentives are recognised over the term of the lease as an integral part of the total lease expense.

Finance leases, where the Group has substantially all the risks and benefits of ownership of the leased asset, are capitalised at the inception of the lease at the lower of the fair value of the leased asset or the present value of the minimum lease payments. The corresponding liability to the lessor is included in the statement of financial position as a finance lease obligation. Lease payments are allocated between the lease obligation and the finance charges resulting in a reduction of the lease obligation to ensure a constant rate of interest on the remaining balance of the liability. Finance charges are charged to the income statement as part of finance costs.

Capitalised leased assets are depreciated over the shorter of the estimated useful life of the asset or the lease term.

### Investments in subsidiaries - Company

Investments in subsidiary undertakings are stated at cost less provision for impairment in the Company's statement of financial position. Loans to subsidiary undertakings which are deemed long term investments in nature are initially recorded at fair value in the Company statement of financial position and subsequently at amortised cost using an effective interest rate methodology.

### Business combinations

Business combinations are accounted for using the acquisition method when control is transferred to the Group. The consideration transferred is measured at fair value, as are the identifiable assets acquired and liabilities assumed. Where a business combination agreement provides for an adjustment to the cost of the acquisition which is contingent upon future events, the amount of the estimated adjustment is recognised on the acquisition date at the acquisition date fair value of this contingent consideration. The accounting treatment of any changes to this estimate in subsequent periods will depend on the classification of the contingent consideration. If the contingent consideration is classified as equity it shall not be re-measured and the settlement shall be accounted for within equity. If the contingent consideration is classified as a liability any adjustments will be accounted for through the consolidated income statement, as the liability is measured at fair value at each reporting date.

## 1. Basis of preparation and statement of accounting policies (continued)

### Business combinations (continued)

The assets, liabilities and contingent liabilities of businesses acquired are measured at their fair values at the date of acquisition. In the case of a business combination which is completed in stages, the fair values of the identifiable assets, liabilities and contingent liabilities are re-determined at the date of each transaction until control is obtained. When the initial accounting for a business combination is determined provisionally, any subsequent adjustments to the provisional values allocated to the identifiable assets, liabilities and contingent liabilities are made within twelve months of the acquisition date and presented as adjustments to the original acquisition accounting. Acquisition costs are expensed as incurred.

### Goodwill

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, if the business combination is achieved in stages, the fair value of the pre-existing equity interest in the acquiree, less the net recognised amount (generally fair value) of the identifiable assets acquired and liabilities assumed. Goodwill on the acquisition of subsidiaries is included in ‘intangible assets – goodwill and other’.

At the acquisition date, any goodwill acquired is allocated to the cash-generating units expected to benefit from the combination’s synergies. Impairment is determined by assessing the recoverable amount of the cash-generating unit to which the goodwill relates. Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured on the basis of the relative values of the operation disposed of and the proportion of the cash-generating unit retained.

Following initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is reviewed for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired.

### Intangible assets

Other intangible assets are stated at cost less accumulated amortisation and impairment losses. Useful lives of intangibles are reviewed and adjusted if appropriate at each reporting date. Amortisation is charged to the income statement on a straight line basis over the estimated useful lives of intangible assets, currently estimated as follows:

| | **Years** |
|---|---|
| Computer software | 2-8 |
| Customer relationships | 6-11 |
| Order backlog | 2-3 |
| Technology Asset | 8 |
| Non-compete arrangements | 5 |

### Impairment of non-financial assets

The carrying amounts of the Group’s non-financial assets, other than deferred tax assets and inventories, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the asset’s recoverable amount is estimated. An estimate of the recoverable amount of goodwill is carried out at each reporting date.

## 1. Basis of preparation and statement of accounting policies (continued)

### Impairment of non-financial assets (continued)

An impairment loss is recognised in the income statement whenever the carrying amount of an asset or its cash generating unit exceeds its recoverable amount. Impairment losses recognised in respect of cash generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash generating units and then, to reduce the carrying amount of other assets in the unit on a pro rata basis.

The recoverable value of non-financial assets is the greater of their net selling price and value in use. Value in use is assessed by discounting estimated future cash flows of the asset to their present value or discounting the estimated future cash flows of the cash generating unit where the asset does not generate independent cash flows. Estimated cash flows are discounted using a pre tax discount rate reflecting current market estimates of the time value of money and the risks specific to the asset.

Impairment losses in respect of other non-financial assets, other than goodwill, are reversed if there has been a change in the estimates used to determine recoverable amount. Impairment losses are reversed only to the extent that the carrying amount of the asset does not exceed the carrying value that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised. Impairment losses in respect of goodwill are not reversed.

### Inventories

Inventories, which comprise laboratory inventories, are stated at the lower of cost and net realisable value. Cost is based on the first-in, first-out principle and includes all expenditure incurred in acquiring the inventories and bringing them to their present location and condition. Cost in the case of raw materials comprises the purchase price and attributable costs, less trade discounts. Net realisable value is the estimated selling price in the ordinary course of business, less selling expenses.

### Trade and other receivables

Trade and other receivables are initially measured at fair value and are thereafter measured at amortised cost using the effective interest rate method less any provision for impairment. A provision for impairment of trade receivables is recognised when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of the receivables. Impairment losses, and any subsequent recovery of such losses, are recognised in the income statement within 'other operating expenses'.

The recoverable amount of receivables carried at amortised cost is calculated by discounting the estimated future cash flows of the asset to their present value, discounted at the original effective interest rate. Receivables with a short duration of less than six months are not discounted.

Impairment losses in respect of receivables carried at amortised cost are reversed if subsequent increases in the recoverable amount of the asset can be related objectively to an event occurring after the impairment loss was recognised.

### Current asset investments – available for sale

Financial instruments held are classified as current assets and are stated at fair value, with any resultant gain or loss recognised as other comprehensive income in the statement of comprehensive income until disposed of or impaired. The fair value of financial instruments classified as available-for-sale is the price that would be received to sell an asset in an orderly transaction.

### Cash and cash equivalents

Cash and cash equivalents include cash and highly liquid investments with original maturities of three months or less and are stated at amortised cost, which approximates fair value.

## 1. Basis of preparation and statement of accounting policies (continued)

### Trade payables

Trade payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest rate method.

### Government grants

Government grants received that compensate the Group for the cost of an asset are recognised in the statement of financial position initially as deferred income when there is reasonable assurance that it will be received and that the Group will comply with the conditions attaching to it. Such grants are recognised in the income statement over the useful economic life of the asset which is consistent with the depreciation policy of the relevant asset.

Grants that compensate the Group for expenses incurred are recognised in the income statement in the same periods in which the expenditure to which they relate is charged.

Under grant agreements amounts received may become repayable in full or in part should certain circumstances specified within the grant agreements occur, including downsizing by the Group, disposing of the related assets, ceasing to carry on its business or the appointment of a receiver over any of its assets. The Group has not recognised any such loss contingency having assessed as remote the likelihood of these events arising.

### Interest bearing loans and borrowings

Interest bearing borrowings are recognised initially at fair value, net of transaction costs incurred. Subsequent to initial recognition, current and non-current interest bearing loans and borrowings are measured at amortised cost with any difference between cost and redemption value being recognised in the income statement over the period of the borrowings on an effective interest basis.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

### Derivative financial instruments and hedging

For the purposes of hedge accounting, hedges are designated either as fair value hedges (which hedge the exposure to movements in the fair value of recognised assets or liabilities or firm commitments that are attributable to hedge risks) or cash flow hedges (which hedge exposures to fluctuations in future cash flows derived from a particular risk associated with recognised assets or liabilities or highly probable forecast transactions).

On entering into a hedging instrument, the Group documents, at inception of the transaction, the relationship between the hedging instrument and the hedged item, as well as its risk management objectives and strategy for undertaking the hedging transaction. The Group also documents its assessment, at the inception of the hedge transaction, whether the derivative used is highly effective in offsetting the change in fair value or cash flows of the hedged item.

In October 2015, the Group entered into an interest rate hedge in respect of the planned issuance of the Senior Notes in December 2015. The interest rate hedge matured in November 2015 when the interest rate on the Senior Notes was fixed. The interest rate hedge was effective in accordance with IAS 39. The cash proceeds, representing the realised gain on the interest rate hedge were received on maturity in November 2015. The gain, representing the instrument's fair value at maturity was recorded in Other Comprehensive Income and is being amortised to the Consolidated Income Statement over the term of the Senior Notes.

## 1. Basis of preparation and statement of accounting policies (continued)

### Provisions

A provision is recognised in the statement of financial position when the Group has a present or 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. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

A provision for restructuring is recognised when the Group has approved a detailed and formal restructuring plan, and the restructuring has either commenced or has been announced publicly. Future operating costs are not provided for.

A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract.

### Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Where ordinary shares are repurchased by the Company they are cancelled and the nominal value of the shares is transferred to other undenominated capital within equity.

### Employee benefits

*(a) Pension and other post-employment benefits*

Certain companies within the Group operate defined contribution pension plans. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Contributions to defined contribution pension plans are expensed as incurred.

The Group operates defined benefit pension plans for certain of its United Kingdom and Swiss employees through subsidiary companies. A defined benefit plan is a pension plan that is not a defined contribution plan. Typically defined benefit plans define the amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation. Obligations for contributions to defined benefit contribution pension plans are recognised as an expense in the income statement as service is received from the relevant employees.

The Group's net obligation in respect of the defined benefit pension plans is calculated separately by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods. This benefit is discounted to determine its present value, and the fair value of plan assets deducted. The discount rate used in respect of the UK scheme is the yield at the reporting date on the iboxx corporate bond over 15 years plus 10 basis points. The discount rate used in respect of the Swiss scheme is determined by the Swiss corporate bond yields at the reporting date. The calculation is performed by a qualified actuary using the projected unit credit method. The net finance income/cost are recorded in operating costs in the Income Statement. When benefits of a plan are improved, the portion of the increased benefit relating to the past service by employees is recognised as an expense in the Income Statement on a straight line basis over the average period until the benefits become vested. To the extent that the benefits vest immediately, the expense is recognised immediately in the Income Statement.

All actuarial gains and losses as at 1 June 2004, the date of transition to IFRS, were recognised and adjusted against retained earnings. Actuarial gains and losses arising after this date are recognised as other comprehensive income immediately in the Statement of Comprehensive Income.

## 1. Basis of preparation and statement of accounting policies (continued)

### Employee benefits (continued)

*(b) Share-based payments*

Share-based payments comprise options to acquire ordinary shares in the Company, RSUs and PSUs in the form of ordinary share entitlements after a certain period of time. These are awarded to certain key employees and Directors of the Group based on service conditions such as term of employment and individual performance. The fair value of options, RSUs and PSUs granted is recognised as an employee expense with a corresponding increase in equity. The fair value is measured at grant date and spread over the period during which the Directors and other employees become unconditionally entitled to the options, RSUs or PSUs. The fair value of options granted is measured using a binomial lattice model, taking into account the terms and conditions upon which the options were granted. The fair value of RSUs and PSUs is equal to the market price of a share at date of grant. The total amount to be expensed is determined by reference to the fair value of the options, RSUs or PSUs granted, excluding the impact of any non-market service and performance vesting conditions (for example profitability, sales growth targets). There are no such non-market vesting conditions during the year ended 31 December 2016 in relation to options, RSUs or PSUs that are expected to vest. The amount recognised as an expense is adjusted to reflect the actual number of share options, RSUs or PSUs that vest.

Forfeitures are estimated on the date of grant and revised if actual or expected forfeiture activity differs materially from original estimates.

Share-based payment expense is recognised over the requisite service period for awards of equity instruments to employees based on the grant date fair value of those awards expected to ultimately vest.

*Share-based payments – Company*

The Company operates a number of share-based payment plans the details of which are presented in note 11 'Share-Based Payments' to the Consolidated Financial Statements. The share-based payment expense associated with the share-based payment plans is recognised by the entity which receives services in exchange for the share-based compensation.

The Income Statement of the Company is charged with the expense related to the services received by the Company. The remaining portions of the share-based payments represent a contribution to Company's subsidiaries and are added to the carrying amount of those investments. Under an agreement, the subsidiaries pay on date of exercise to the Company an amount equal to the fair value of the ordinary shares issued that is in excess of the award exercise price with such amount reducing the Company's investment in its subsidiaries. The net effect of the grant date fair value of the Company's share-based compensation to employees of the Company's subsidiaries and recharges received from those subsidiaries is presented as a movement in financial fixed assets. Please see note 3, Investment in subsidiaries, in the Company only financial statements below.

### Revenue recognition

The Group primarily earns revenues by providing clinical research services to its customers. Clinical research services include clinical trials management, biometric activities, consulting, imaging, contract staffing, informatics and laboratory services. Contracts range in duration from a number of months to several years.

Revenue is measured at the fair value of the consideration received or receivable. The Group recognises revenue when it is probable that future economic benefits will flow to the entity; and when specific criteria have been met for each of the Group's activities, as described below.

## 1. Basis of preparation and statement of accounting policies (continued)

### Revenue recognition (continued)

Revenue is recognised according to the type of service provided as follows:

Clinical trials management revenue is recognised on a proportional performance method. Depending on the contractual terms, revenue is either recognised on the percentage of completion method, based on the relationship between hours incurred and the total estimated hours of the trial, or on the unit of delivery method. Contract costs equate to the product of labour hours incurred and compensation rates. For the percentage of completion method, the input (effort expended) method has been used to measure progress towards completion as there is a direct relationship between input and productivity.

Contract revenue is the product of the aggregated labour hours required to complete the specified contract tasks at the agreed contract rates. The Company regularly reviews the estimate of total contract time to ensure such estimates remain appropriate taking into account actual contract stage of completion, remaining time to complete and any identified changes to the contract scope. Remaining time to complete depends on the specific contract tasks, the complexity of the contract and can include geographical site selection and initiation, patient enrollment, patient testing and level of results analysis required. While the Group may routinely adjust time estimates, estimates and assumptions historically have been accurate in all material respects. Where revenue is recognised on the unit of delivery method, the basis applied is the number of units completed as a percentage of the total number of contractual units.

In the event of contract termination, if the value of work performed and recognised as revenue is greater than aggregate milestone billings at the date of termination, cancellation clauses provide that the Group is paid for work performed to the termination date.

Biometrics revenue is recognised on a fee-for-service method as each unit of data is prepared on the basis of the number of units completed in a period as a percentage of the total number of contracted units. Imaging revenue is recognised on a fee-for-service basis recognising revenue for each image completed. Consulting revenue is recognised on a fee-for-service basis as each hour of the related service is performed. Contract staffing revenue is recognised on a fee-for-service basis, over the time the related service is performed, or in the case of permanent placement, once the candidate has been placed with the client. Informatics revenue is recognised on a fee-for-service basis. Informatics contracts are treated as multiple element arrangements, with contractual elements comprising license fee revenue, support fee revenue and revenue from software services, each of which can be sold separately. Sales prices for contractual elements are determined by reference to objective and reliable evidence of their sales price. License and support fee revenues are recognised rateably over the period of the related agreement. Revenue from software services is recognised using the percentage of completion method based on the relationship between hours incurred and the total estimated hours required to perform the service.

Laboratory service revenue is recognised on a fee-for-service basis. The Company accounts for laboratory service contracts as multiple element arrangements, with contractual elements comprising laboratory kits and laboratory testing, each of which can be sold separately. Sales prices for contractual elements are determined by reference to objective and reliable evidence of their sales price. Revenues for contractual elements are recognised on the basis of the number of deliverable units completed in the period.

Contracts generally contain provisions for renegotiation in the event of changes in the scope, nature, duration, or volume of services of the contract. Renegotiated amounts are recognised as revenue by revision to the total contract value arising as a result of an authorised customer change order.

## 1. Basis of preparation and statement of accounting policies (continued)

### Revenue recognition (continued)

The difference between the amount of revenue recognised and the amount billed on a particular contract is included in the balance sheet as unbilled revenue or payments on account. Normally, amounts become billable upon the achievement of certain milestones, for example, target patient enrolment rates, clinical testing sites initiated or case report forms completed. Once the milestone target is reached, amounts become billable in accordance with pre-agreed payment schedules included in the contract or on submission of appropriate billing detail. Such cash payments are not representative of revenue earned on the contract as revenues are recognised over the period in which the specified contractual obligations are fulfilled. Amounts included in unbilled revenue are expected to be collected within one year and are included within current assets. Advance billings to customers, for which revenue has not been recognised, are recognised as payments on account within current liabilities.

### Reimbursable expenses

Reimbursable expenses comprise investigator payments and certain other costs which are reimbursed by clients under terms specific to each contract and are deducted from gross revenue in arriving at net revenue. Investigator payments are accrued based on patient enrolment over the life of the contract. Investigator payments are made based on predetermined contractual arrangements, which may differ from the accrual of the expense.

### Direct costs

Direct costs consist of compensation, associated employee benefits and share-based payments for project-related employees and other direct project-related costs.

### Other operating expenses

Other operating expenses consist of compensation, associated employee benefits and share-based payments for non-project-related employees and other indirect costs associated with the business. Other operating expenses also include depreciation expense and the amortisation of intangible assets.

### Exceptional items

The Company has used the term “exceptional” to describe certain items which, in management’s view, warrant separate disclosure by virtue of their size or incidence, or due to the fact that certain gains or losses are determined to be non-recurring in nature. Exceptional items may include restructuring, significant impairments, and material changes in estimates.

### Research and development credits

Research and development credits that are provided under the income tax law of the jurisdictions in which the Group operates generally are recognised as a reduction of income tax expense. However, certain tax jurisdictions provide refundable credits that are not dependent on the Group’s ongoing tax status or tax position. In these circumstances the credits are recognised in the income statement in the same periods in which the expenditure to which they relate to is charged as a deduction against the related expense.

### Financing expense

Financing expense comprises interest payable on borrowings calculated using the effective interest rate method, finance charges on finance leases, foreign exchange gains and losses on bank loans, non-cash finance charges in respect of contingent consideration and gains and losses on hedging instruments that are recognised in the income statement.

Financing expense also includes fees paid on the establishment of loan facilities which are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. These fees are deferred and recognised in the Statement of Financial Position and are then amortised to the Consolidated Income Statement over the term the facility is available to the Group.

## 1. Basis of preparation and statement of accounting policies (continued)

### Financing income

Interest income is recognised in the income statement as it accrues using the effective interest rate method and includes interest receivable on investments.

### Income tax

Income tax expense in the income statement represents the sum of income tax currently payable and deferred income tax.

Income tax currently payable is based on taxable profit for the year. Taxable profit differs from net profit as reported in the income statement because it excludes items of income or expense that are taxable or deductible in other years and further excludes items that are not taxable or deductible. The Group's liability for income tax is calculated using rates that have been enacted or substantively enacted at the reporting date. Income tax is recognised in the income statement except to the extent that it relates to items recognised directly in equity.

Deferred income tax is provided, using the liability method, on all differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes except those arising from non-deductible goodwill or on initial recognition of an asset or liability which affects neither accounting nor taxable profit.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is expected to be realised or the liability to be settled.

Deferred tax assets are recognised for all deductible differences, carry forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences and the carry forward of unused tax credits and unused tax losses can be utilised. The carrying amount of deferred income tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit would be available to allow all or part of the deferred income tax asset to be utilised.

### Earnings per ordinary share

Basic earnings per share is computed by dividing the profit for the financial year attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the financial period.

Diluted earnings per share is computed by dividing the profit for the financial year attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares in issue after adjusting for the effects of all potential dilutive ordinary shares that were outstanding during the financial period.

### Segment reporting

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Group's other components. The Group determines and presents operating segments based on the information that internally is provided to the Chief Executive Officer (CEO), Chief Financial Officer (CFO) and Chief Operating Officer (COO) who together are considered the Group's chief operating decision makers, the 'CODM'. An operating segment's operating results are reviewed regularly by the CEO, CFO and COO to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available.

Segment results that are reported to the CEO, CFO and COO include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Segment capital expenditure is the total cost incurred during the period to acquire property, plant and equipment and intangible assets other than goodwill.

## 2. Segmental information

The Group is a contract research organisation ("CRO"), providing outsourced development services on a global basis to the pharmaceutical, biotechnology and medical device industries. It specialises in the strategic development, management and analysis of programmes that support all stages of the clinical development process - from compound selection to Phase I-IV clinical studies. The Group has expanded predominately through internal growth, together with a number of strategic acquisitions to enhance its expertise and capabilities in certain areas of the clinical development process. The Group has the expertise and capability to conduct clinical trials in most major therapeutic areas on a global basis and has the operational flexibility to provide development services on a stand-alone basis or as part of an integrated "full service" solution. These services, which are integral elements of the clinical development process, include clinical trials management, biometric activities, consulting, imaging, contract staffing, informatics and laboratory services.

The Group determines and presents operating segments in accordance with IFRS 8 *Operating Segments* based on the information that internally is provided to the Chief Executive Officer (CEO), Chief Financial Officer (CFO) and Chief Operating Officer (COO) who together are considered the Group's chief operating decision makers. The Group has determined that it has one operating segment - Clinical Research.

The Group's listing for its shares is the NASDAQ market in the United States. Consequently, information reviewed by the chief operating decision makers is prepared in accordance with US generally accepted accounting principles ("US GAAP") however the information presented below is prepared in accordance with IFRS reporting standards. Reconciliations of the Group's profit for the financial year and shareholders' equity from US GAAP to IFRS are set out on pages 123 to 124 of this report. The Company's areas of operation outside of Ireland include the United States, United Kingdom, Belgium, France, Germany, Italy, Spain, The Netherlands, Sweden, Turkey, Poland, Czech Republic, Latvia, Russia, Ukraine, Hungary, Israel, Romania, Switzerland, Canada, Mexico, Brazil, Colombia, Argentina, Chile, Peru, India, China, South Korea, Japan, Thailand, Taiwan, Singapore, The Philippines, Australia, New Zealand, and South Africa.

## 2. Segmental information *(continued)*

*Geographical segment information*

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| **External revenue** | | |
| Ireland | **410,572** | 429,631 |
| Rest of Europe | **313,185** | 330,487 |
| United States | **763,821** | 650,941 |
| Rest of World | **178,909** | 163,919 |
| **Total** | **1,666,487** | 1,574,978 |

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| **Non-current assets** | | |
| Ireland | **234,388** | 154,398 |
| Europe | **163,082** | 124,804 |
| United States | **457,548** | 574,213 |
| Rest of World | **38,695** | 29,190 |
| **Total** | **893,713** | 882,605 |

*Major customers*

During the year ended 31 December 2016, 26% (2015: 31%) of the Group's net revenues were derived from its top customer which is the only customer which represents in excess of 10% of the Group's net revenue.

## 3. Profit before taxation

Profit before taxation is stated after charging the following:

| | **Year ended 31 December 2016** | | | Year ended 31 December 2015 | | |
|---|---|---|---|---|---|---|
| | **Statutory auditor** | **Affiliated firms** | **Total** | Statutory auditor | Affiliated firms | Total |
| | **$'000** | **$'000** | **$'000** | $'000 | $'000 | $'000 |
| **Auditors' remuneration:** | | | | | | |
| Audit fees (1) (2) | **1,315** | **-** | **1,315** | 1,555 | 58 | 1,613 |
| Other assurance fees (3) | **49** | **73** | **122** | 43 | 10 | 53 |
| Tax advisory fees (4) | **673** | **319** | **992** | 1,096 | 198 | 1,294 |
| Other non-audit fees (5) | **97** | **56** | **153** | 181 | - | 181 |
| **Total fees** | **2,134** | **448** | **2,582** | 2,875 | 266 | 3,141 |

*(1) Audit fees include annual audit fees for ICON plc.*

*(2) Audit fees for the Company for the year are set at $30,000 (2015: $30,000).*

*(3) Other assurance fees principally consist of fees for the audit of remaining subsidiaries and fees for the audit of the financial statements of employee benefit plans.*

*(4) Tax advisory fees are for tax compliance and tax advisory services.*

*(5) Other non-audit fees principally consist of fees for financial due diligence.*

Directors' remuneration disclosures as required by Section 305 of the Companies Act 2014 are set out below;

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| **Directors' emoluments** | | |
| Emoluments | **4,287** | 7,605 |
| Benefits under long-term incentive schemes | **11,630** | 8,563 |
| Gain on exercise of share options | **1,923** | 7,314 |
| Pension contributions (defined contribution) | **165** | 201 |

Further details regarding Directors' shareholdings, share options and compensation are shown in note 9 – Payroll and related benefits.

Retirement benefits accrue to one Director (2015: one Director) under a defined contribution scheme. Additional amounts of $163,000 (2016) and $155,000 (2015) are paid to another Director in lieu of a contribution to a defined contribution scheme.

Included in the benefits under long-term incentive scheme are amounts relating to share entitlements, the calculation of which was based on the share-based payment charge calculated under IFRS 2.

## 3. Profit before taxation (continued)

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| **Depreciation and amortisation** | | |
| Depreciation of property, plant and equipment | **19,614** | 21,887 |
| Amortisation of intangible assets | **39,961** | 35,790 |
| **Total depreciation and amortisation** | **59,575** | 57,677 |
| **Loss on sale of property, plant & equipment** | **151** | 55 |

| **Operating lease rentals** | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| Premises | **39,781** | 44,219 |
| Motor vehicles | **3,891** | 4,676 |
| Plant and equipment | **324** | 1,048 |
| **Total operating lease rentals *** | **43,996** | 49,943 |

** Operating lease rentals includes rate expenses incurred during the year.*

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| **Government grants** | | |
| Repayment of government grant | **-** | 159 |
| **Total government grants** | **-** | 159 |

## 4. Financing income

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| Interest receivable | **1,484** | 1,306 |
| | **1,484** | 1,306 |

All of the above relates to items not at fair value through profit and loss.

## 5. Financing expense

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| Interest and facility fees on bank overdraft and Senior Notes | | |
| - repayable within 5 years, not by instalments* | **13,115** | 631 |
| Other interest | **248** | 2,116 |
| Facility fees (including amortisation) | **566** | 1,286 |
| Amortisation of gain on interest rate hedge | **(923)** | (41) |
| | **13,006** | 3,992 |

All of the above relates to items not at fair value through profit and loss.

**The interest rate on the Senior Notes is fixed at 3.64%. Costs directly related to the Senior Notes are amortised over the term of the Senior Notes.*

## 6. Income tax expense

The components of the current and deferred tax expense for the years ended 31 December 2016 and 2015 were as follows:

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| **Current tax expense** | | |
| Current year | | |
| – Ireland | **24,961** | 22,219 |
| – Other | **15,750** | 14,052 |
| | **40,711** | 36,271 |
| **Deferred tax (credit)/charge** | | |
| Origination and reversal of temporary differences | **(7,363)** | 3,581 |
| **Over provided in prior years** | **(917)** | (442) |
| **Total income tax expense in the consolidated income statement** | **32,431** | 39,410 |
| **Current tax recognised in equity** | | |
| Share based payment | **(6,403)** | (1,905) |
| **Total current tax recognised in equity** | **(6,403)** | (1,905) |
| **Current tax recognised in other comprehensive income** | | |
| Tax on currency impact on long term funding | **(396)** | 3,574 |
| **Total current tax recognised in other comprehensive income** | **(396)** | 3,574 |

## 6. Income tax expense (continued)

The total tax expense of $32.4 million and $39.4 million for the years ended 31 December 2016 and 31 December 2015 respectively, reflects tax at standard rates on taxable profits in the jurisdictions in which the group operates, foreign withholding tax and the availability of tax losses.

The deferred tax credit of $7.4 million for the year ended 31 December 2016 and the deferred tax charge of $3.6 million for the year ended 31 December 2015, relates to deferred tax arising in respect of net operating losses and temporary differences in capital items, the timing of certain goodwill amortisation on US acquisitions and the timing of tax deductions available relating to the Group's share based compensation schemes. No deferred tax asset has been recognised on the defined benefit pension scheme as it is not probable that sufficient taxable profit will be available against which the deductible temporary difference can be utilised.

A reconciliation of the expected tax expense, computed by applying the standard Irish tax rate to income before tax to the actual tax expense, is as follows:

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| Profit before tax | **300,391** | 279,434 |
| Irish standard tax rate | **12.5%** | 12.5% |
| Taxes at Irish standard tax rate | **37,549** | 34,929 |
| Reversal of prior year over provision in respect of current foreign taxes | **(917)** | (442) |
| Foreign and other income taxed at higher rates | **7,444** | 4,451 |
| Recognition of previously unrecognised tax benefits for uncertain tax positions | **(4,370)** | (66) |
| Effect of change in tax rates | **576** | (16) |
| (Decrease)/increase in unrecognised tax benefits | **(1,521)** | 5,085 |
| Non taxable income and non tax deductible expenses | **(8,281)** | (192) |
| Losses for which no benefit has been recognised | **1,208** | (4,133) |
| Research and development tax incentives | **(907)** | (695) |
| Other | **1,650** | 489 |
| **Tax expense on profit for the year** | **32,431** | 39,410 |

## 6. Income tax expense (continued)

The net deferred tax asset at 31 December 2016 and 31 December 2015 was as follows:

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Deferred taxation assets** | | |
| Net operating losses carried forward | **4,089** | 6,490 |
| Accrued expenses and payments on account | **27,445** | 28,910 |
| Property, plant and equipment | **2,859** | 4,410 |
| Deferred compensation | **3,327** | 2,174 |
| Share based payment | **31,355** | 32,990 |
| Other | **15** | 47 |
| Total deferred taxation assets | **69,090** | 75,021 |
| Less: offset against deferred tax liabilities | **(31,105)** | (28,253) |
| Deferred tax asset disclosed on Statement of Financial Position | **37,985** | 46,768 |

| **Deferred taxation liabilities** | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Property, plant and equipment | **979** | 2,665 |
| Goodwill and related assets | **26,617** | 21,571 |
| Other intangible assets | **6,700** | 7,369 |
| Other | **-** | 7 |
| Accruals to cash method adjustment | **1,440** | 1,284 |
| Total deferred taxation liabilities | **35,736** | 32,896 |
| Less: offset against deferred tax assets | **(31,105)** | (28,253) |
| Deferred tax liability disclosed on Statement of Financial Position | **4,631** | 4,643 |
| **Net deferred taxation asset** | **33,354** | 42,125 |

## 6. Income tax expense *(continued)*

The movement in temporary differences during the year ended 31 December 2016 was as follows:

| | Balance 1 January 2016 $'000 | Recognised in Income $'000 | Recognised on Acquisition $'000 | Recognised in Other Comprehensive Income $'000 | Recognised in Equity $'000 | Balance 31 December 2016 $'000 |
|---|---|---|---|---|---|---|
| **Deferred taxation assets** | | | | | | |
| Net operating loss carry forwards | **6,490** | (2,401) | - | - | - | **4,089** |
| Accrued expenses and payments on account | **28,910** | (1,451) | (14) | - | - | **27,445** |
| Property, plant and equipment | **4,410** | (1,649) | 98 | - | - | **2,859** |
| Deferred compensation | **2,174** | 1,153 | - | - | - | **3,327** |
| Share based payment | **32,990** | 7,735 | - | - | (9,370) | **31,355** |
| Other | **47** | (235) | 203 | - | - | **15** |
| **Total deferred taxation assets** | **75,021** | **3,152** | **287** | **-** | **(9,370)** | **69,090** |
| **Deferred taxation liabilities** | | | | | | |
| Property, plant and equipment | **2,665** | (1,686) | - | - | - | **979** |
| Goodwill on acquisition | **21,571** | 4,766 | - | - | 280* | **26,617** |
| Accruals to cash method adjustment | **1,284** | 684 | (560) | - | 32* | **1,440** |
| Other intangible assets | **7,369** | (4,622) | 3,953 | - | - | **6,700** |
| Other | **7** | (7) | - | - | - | **-** |
| **Total deferred taxation liabilities** | **32,896** | **(865)** | **3,393** | **-** | **312** | **35,736** |
| **Net deferred taxation asset/ (liability)** | **42,125** | **4,017** | **(3,106)** | **-** | **(9,682)** | **33,354** |

**These adjustments relate to foreign currency translation on the deferred tax assets.*

## 6. Income tax expense *(continued)*

The movement in temporary differences during the year ended 31 December 2015 was as follows:

| | Balance 1 January 2015 $'000 | Recognised in Income $'000 | Recognised on Acquisition $'000 | Recognised in Other Comprehensive Income $'000 | Recognised in Equity $'000 | Balance 31 December 2015 $'000 |
|---|---|---|---|---|---|---|
| **Deferred taxation assets** | | | | | | |
| Net operating loss carry forwards | **8,672** | (997) | (1,185) | - | - | **6,490** |
| Accrued expenses and payments on account | **37,296** | (9,985) | 1,299 | - | 300* | **28,910** |
| Property, plant and equipment | **3,448** | 928 | - | - | 34* | **4,410** |
| Deferred compensation | **1,853** | 321 | - | - | - | **2,174** |
| Share based payment | **17,700** | 4,143 | - | - | 11,147 | **32,990** |
| Other | **891** | (844) | - | - | - | **47** |
| **Total deferred taxation assets** | **69,860** | **(6,434)** | **114** | **-** | **11,481** | **75,021** |
| **Deferred taxation liabilities** | | | | | | |
| Property, plant and equipment | **4,270** | (1,605) | - | - | - | **2,665** |
| Goodwill on acquisition | **18,645** | 2,926 | - | - | - | **21,571** |
| Accruals to cash method adjustment | **1,947** | (663) | - | - | - | **1,284** |
| Other intangible assets | **3,657** | (3,841) | 7,553 | - | - | **7,369** |
| Other | **-** | 7 | - | - | - | **7** |
| **Total deferred taxation liabilities** | **28,519** | **(3,176)** | **7,553** | **-** | **-** | **32,896** |
| **Net deferred taxation asset/ (liability)** | **41,341** | **(3,258)** | **(7,439)** | **-** | **11,481** | **42,125** |

* *These adjustments relate to foreign currency translation on the deferred tax assets.*

*Unrecognised deferred tax assets*

Deferred tax assets relating to the following net operating losses have not been recognised to the extent that it is considered unlikely that a benefit will be received in the future.

At 31 December 2016, non-US subsidiaries had operating loss carry-forwards for income tax purposes that may be carried forward indefinitely, available to offset against future taxable income, if any, of approximately $58.8 million (31 December 2015: $57.5 million). At 31 December 2016, non-US subsidiaries also had additional operating loss carry forwards of $2.7 million which are due to expire between 2017 and 2019.

## 6. Income tax expense *(continued)*

In total, the Group has unrecognised deferred tax assets at 31 December 2016 of $21.9 million and $21.5 million at 31 December 2015. The Group has not recognised the remaining deferred tax assets because it believes that it is more likely than not that the losses and other deferred tax assets will not be utilised given their history of operating losses.

*Unrecognised deferred tax liabilities*

At 31 December 2016 and 31 December 2015 respectively, there were no recognised or unrecognised deferred tax liabilities for taxes that would be payable on the unremitted earnings of certain of the Group's subsidiaries. The Group is able to control the timing of the reversal of the temporary differences of its subsidiaries and it is probable that these temporary differences will not reverse in the foreseeable future.

## 7. Earnings per share

The following table sets forth the computation for basic and diluted net earnings per share for the year ended 31 December 2016:

| | **31 December 2016 $'000 Excluding Exceptional items** | **31 December 2016 $'000 Exceptional items** | **31 December 2016 $'000 Including Exceptional items** | 31 December 2015 $'000 Excluding Exceptional items | 31 December 2015 $'000 Exceptional items | 31 December 2015 $'000 Including Exceptional items |
|---|---|---|---|---|---|---|
| **Numerator computations** | | | | | | |
| *Basic and diluted earnings per share* | | | | | | |
| Profit for the period | **275,099** | **(7,139)** | **267,960** | 240,024 | - | 240,024 |
| Profit attributable to equity holders | **275,099** | **(7,139)** | **267,960** | 240,024 | - | 240,024 |
| **Denominator computations** | | | **Number of Shares** | | | |
| Weighted average number of ordinary shares outstanding – basic | **55,248,900** | **55,248,900** | **55,248,900** | 58,746,935 | 58,746,935 | 58,746,935 |
| Effect of dilutive potential ordinary shares | **1,336,576** | **1,336,576** | **1,336,576** | 1,953,421 | 1,953,421 | 1,953,421 |
| Weighted average number of ordinary shares outstanding - diluted | **56,585,476** | **56,585,476** | **56,585,476** | 60,700,356 | 60,700,356 | 60,700,356 |
| **Earnings per Share** | **$** | **$** | **$** | $ | $ | $ |
| Basic earnings per ordinary share | **4.98** | **(0.13)** | **4.85** | 4.09 | - | 4.09 |
| Diluted earnings per ordinary share | **4.86** | **(0.13)** | **4.74** | 3.95 | - | 3.95 |

The Company had 638,591 anti-dilutive shares in issue at 31 December 2016 (31 December 2015: 392,435).

## 8. Exceptional items

Exceptional items are comprised of the following:

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Restructuring charges | **8,159** | - |
| Income tax | **(1,020)** | - |
| **Exceptional items (net)** | **7,139** | - |

A restructuring charge of $8.2 million was recognised during the year ended 31 December 2016 under a restructuring plan adopted following a review by the Company of its operations. The restructuring plan includes resource rationalisations in certain areas of the business to improve resource utilisation, resulting in a charge of $6.2 million and office consolidation resulting in the recognition of an onerous lease obligation of $2.0 million.

| | **Workforce Reductions $'000** | **Onerous Lease $'000** | **Total $'000** |
|---|---|---|---|
| Total provision recognised | 6,190 | 1,969 | 8,159 |
| Utilisation | (5,734) | (571) | (6,305) |
| Foreign exchange | (63) | - | (63) |
| Provision at 31 December 2016 | 393 | 1,398 | 1,791 |

*Restructuring Charges - 2014*

A restructuring charge of $8.8 million was recognised during the year ended 31 December 2014. Following the closure of the Company's European Phase 1 services in 2013, the Company recognised a charge in 2014 in relation to its Manchester, United Kingdom facility; $5.6 million in relation to asset impairments and $3.2 million in relation to an onerous lease charge associated with this facility. We expect this to be paid by 2024.

| | **Onerous Lease $'000** | **Asset Impairment $'000** | **Total $'000** |
|---|---|---|---|
| Total provision recognised | 3,167 | 5,629 | 8,796 |
| Asset write-off | - | (5,629) | (5,629) |
| Provision at 31 December 2014 | 3,167 | - | 3,167 |
| Utilisation | (1,167) | - | (1,167) |
| Provision at 31 December 2015 | 2,000 | - | 2,000 |
| Utilisation | (1,359) | - | (1,359) |
| Provision at 31 December 2016 | 641 | - | 641 |

## 9. Payroll and related benefits

*Payroll costs*

The aggregate payroll costs of employees of the Group for the year ended 31 December 2016 were as follows:

| | Note | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|---|
| Wages and salaries | | **870,078** | 835,825 |
| Social welfare costs | | **120,766** | 112,498 |
| Pension costs for defined contribution pension schemes | | **36,175** | 33,631 |
| Pension costs for defined benefit pension schemes | 10 | **529** | 884 |
| Termination benefits | 8 | **6,190** | - |
| Share based payment* | 11 | **40,310** | 33,187 |
| **Total charge to income** | | **1,074,048** | 1,016,025 |
| Re-measurement of post-employment benefit obligations | 10 | **2,675** | (2,236) |
| **Total payroll and related benefit costs** | | **1,076,723** | 1,013,789 |

** IFRS 2 Share based Payments requires that the fair value of share options and restricted share units is calculated and amortised over the vesting period of the related share option, restricted share unit or performance share unit.*

*Average employee numbers*

The average number of employees, including executive Directors, employed by the Group during the year ended 31 December 2016 was as follows:

| | **31 December 2016** | 31 December 2015 |
|---|---|---|
| Marketing | **210** | 189 |
| Administration | **1,349** | 1,381 |
| Clinical research | **10,345** | 9,507 |
| Laboratory | **503** | 464 |
| Total | **12,407** | 11,541 |

### Directors' remuneration

*Remuneration policy*

The Compensation and Organisation Committee seeks to achieve the following goals with the Company's executive compensation programmes: to attract, motivate and retain key executives and to reward executives for value creation. The Committee seeks to foster a performance-oriented environment by ensuring that a significant portion of each executive's cash and equity compensation is based on the achievement of performance targets that are important to the Company and its shareholders.

The Company's executive compensation programme has three main elements: base salary, a bonus plan and equity incentives in the form of share related awards granted under the Company's equity incentive plans. All elements of key executives' compensation are determined by the Compensation and Organisation Committee based on the achievement of the Group's and individual performance objectives.

## 9. Payroll and related benefits (continued)

*Non-Executive Directors' remuneration*

Non-Executive Directors are remunerated by way of Directors' fees and are also eligible for participation in the share option scheme. During 2016, each Non-Executive Director (excluding the Board Chairman) was paid an annual retainer of $65,000 and additional fees for Board Committee service.

During 2016, Mr. Thomas Lynch served as the Chairman of the Board in the period to his retirement as Chairman on 31 March 2016. The agreement with the Chairman of the Board provided for payment of €463,500 annually. Mr Lynch did not receive additional payment for Board Committee service, during the period that he served as Chairman.

Mr. Declan McKeon has served as Acting Chairman of the Board since April 2016. The agreement with the Acting Chairman of the Board provided for payment of €300,000 (translated at average rate for the year: $331,800) annually. Mr. McKeon did not receive additional payment for Board Committee service during the period that he served as Acting Chairman.

Non-Executive Directors are not eligible for performance related bonuses and no pension contributions are made on their behalf. The Compensation and Organisation Committee sets non-Executive remuneration.

*Executive Directors' and Key Executive Officers' remuneration*

Total cash compensation is divided into a base salary portion and a bonus incentive portion. The Committee targets total cash compensation with regard to healthcare/biopharmaceutical companies of similar market capitalisation and peer CRO companies, adjusted upward or downward based on individual performance and experience and level of responsibility. The Compensation and Organisation Committee believes that the higher the executive's level of responsibility within the Company, the greater the percentage of the executive's compensation that should be tied to the Company's performance. Target bonus incentive for executive officers range between 60% and 100% with actual pay outs ranging from 39% to 50% of salary based on group and individual performance.

A total bonus of $1.1 million was awarded to the following individuals; Mr. Ciaran Murray Chief Executive Officer ($0.6 million); Mr. Brendan Brennan Chief Financial Officer ($0.2 million); and Dr. Steve Cutler Chief Operating Officer ($0.3 million) to reflect their contribution to the performance of the Company during 2016. These amounts were approved by the Compensation and Organisation Committee and will be paid during the year-ended 31 December 2017.

The Company's executives are eligible to receive equity incentives, including stock options, restricted share units and performance share units, granted under the Company's equity incentive plans. If executives receive equity incentive grants, they are normally approved annually at the first scheduled meeting of the Committee in the fiscal year. The grant date is determined by the Committee, and grants are awarded at the closing price on the day of grant. Newly hired executives may receive sign-on grants, if approved by the Committee. In addition, the Committee may, in its discretion, issue additional equity incentive awards to executives if the Committee determines such awards are necessary to ensure appropriate incentives are in place. The number of equity awards granted to each participant is determined primarily by the Committee at the start of each year based on peer groups and advice from independent compensation consultants.

All executive officers are eligible to participate in pension plans. The Company's contributions are generally a fixed percentage of their annual compensation, supplementing contributions by the executive. The Company has the discretion to make additional contributions if deemed appropriate by the Committee. Contributions to this plan are recorded as an expense in the Consolidated Statement of Operations.

**9. Payroll and related benefits (continued)**

The Directors, Executive Officers and Company Secretary have the following interests, all of which are beneficial, other than as stated, in the shares and share options of the Company or other Group companies at the following dates:

| | | **Interest at 31 December 2016** | | Interest at 31 December 2015 | |
|---|---|---|---|---|---|
| **Name** | **Name of company and description of shares** | **Number of shares** | **Options** | Number of shares | Options |
| Ciaran Murray | ICON plc Ordinary Shares €0.06 | **-** | **358,805** | 29,998 | 301,370 |
| Brendan Brennan | ICON plc Ordinary Shares €0.06 | **7,311** | **53,927** | 5,950 | 48,341 |
| Dr. Steve Cutler | ICON plc Ordinary Shares €0.06 | **27,391** | **151,260** | 9,365 | 148,549 |
| Dr. John Climax | ICON plc Ordinary Shares €0.06 | **1,015,011** | **89,057** | 1,015,211 | 78,500 |
| Dr. Ronan Lambe | ICON plc Ordinary Shares €0.06 | **600** | **39,057** | 400 | 30,500 |
| Prof. Dermot Kelleher | ICON plc Ordinary Shares €0.06 | **-** | **34,957** | - | 24,400 |
| Declan McKeon | ICON plc Ordinary Shares €0.06 | **-** | **40,057** | - | 29,500 |
| Prof. William Hall | ICON plc Ordinary Shares €0.06 | **-** | **29,557** | - | 27,500 |
| Mary Pendergast | ICON plc Ordinary Shares €0.06 | **-** | **30,557** | - | 20,000 |
| Prof. Hugh Brady | ICON plc Ordinary Shares €0.06 | **-** | **30,557** | - | 20,000 |
| Ronan Murphy | ICON plc Ordinary Shares €0.06 | **-** | **-** | - | - |
| Diarmaid Cunningham | ICON plc Ordinary Shares €0.06 | **396** | **30,224** | 488 | 30,945 |

## 9. Payroll and related benefits (continued)

Further details regarding the above share options are as follows:

| Name | Options | Exercise price | Grant date | Expiry date |
|---|---|---|---|---|
| Ciaran Murray | 6,000 | $20.28 | 3 March 2011 | 3 March 2019 |
| | 60,000 | $16.80 | 31 October 2011 | 31 October 2019 |
| | 20,000 | $22.30 | 27 April 2012 | 27 April 2020 |
| | 77,873 | $32.37 | 1 May 2013 | 1 May 2021 |
| | 25,076 | $47.03 | 3 March 2014 | 3 March 2022 |
| | 53,828 | $48.67 | 17 March 2014 | 17 March 2022 |
| | 58,593 | $68.39 | 18 March 2015 | 18 March 2023 |
| | 57,435 | $71.95 | 4 March 2016 | 4 March 2024 |
| Brendan Brennan | 4,000 | $20.59 | 22 February 2012 | 22 February 2020 |
| | 15,813 | $32.37 | 1 May 2013 | 1 May 2021 |
| | 3,251 | $47.03 | 3 March 2014 | 3 March 2022 |
| | 6,967 | $48.67 | 17 March 2014 | 17 March 2022 |
| | 10,285 | $68.39 | 18 March 2015 | 18 March 2023 |
| | 13,611 | $71.95 | 4 March 2016 | 4 March 2024 |
| Dr. Steve Cutler | 6,000 | $17.17 | 7 November 2011 | 7 November 2019 |
| | 6,000 | $20.59 | 22 February 2012 | 22 February 2020 |
| | 43,539 | $32.37 | 1 May 2013 | 1 May 2021 |
| | 10,761 | $47.03 | 3 March 2014 | 3 March 2022 |
| | 23,078 | $48.67 | 17 March 2014 | 17 March 2022 |
| | 31,250 | $68.39 | 18 March 2015 | 18 March 2023 |
| | 30,632 | $71.95 | 4 March 2016 | 4 March 2024 |
| Dr. John Climax | 50,000 | $15.84 | 30 April 2009 | 30 April 2017 |
| | 2,000 | $24.46 | 4 March 2010 | 4 March 2018 |
| | 2,000 | $20.28 | 3 March 2011 | 3 March 2019 |
| | 2,000 | $22.30 | 27 April 2012 | 27 April 2020 |
| | 2,500 | $32.37 | 1 May 2013 | 1 May 2021 |
| | 10,000 | $40.83 | 23 May 2014 | 23 May 2022 |
| | 10,000 | $68.39 | 18 March 2015 | 18 March 2023 |
| | 10,557 | $65.60 | 20 May 2016 | 20 May 2024 |
| Dr. Ronan Lambe | 2,000 | $24.46 | 4 March 2010 | 4 March 2018 |
| | 2,000 | $20.28 | 3 March 2011 | 3 March 2019 |
| | 2,000 | $22.30 | 27 April 2012 | 27 April 2020 |
| | 2,500 | $32.37 | 1 May 2013 | 1 May 2021 |
| | 10,000 | $40.83 | 23 May 2014 | 23 May 2022 |
| | 10,000 | $68.39 | 18 March 2015 | 18 March 2023 |
| | 10,557 | $65.60 | 20 May 2016 | 20 May 2024 |

## 9. Payroll and related benefits (continued)

| Name | Options | Exercise price | Grant date | Expiry date |
|---|---|---|---|---|
| Prof. Dermot Kelleher | 400 | $24.46 | 4 March 2010 | 4 March 2018 |
| | 800 | $20.28 | 3 March 2011 | 3 March 2019 |
| | 1,200 | $22.30 | 27 April 2012 | 27 April 2020 |
| | 2,000 | $32.37 | 1 May 2013 | 1 May 2021 |
| | 10,000 | $40.83 | 23 May 2014 | 23 May 2022 |
| | 10,000 | $68.39 | 18 March 2015 | 18 March 2023 |
| | 10,557 | $65.60 | 20 May 2016 | 20 May 2024 |
| Declan McKeon | 3,000 | $29.45 | 29 April 2010 | 29 April 2018 |
| | 2,000 | $20.28 | 3 March 2011 | 3 March 2019 |
| | 2,000 | $22.30 | 27 April 2012 | 27 April 2020 |
| | 2,500 | $32.37 | 1 May 2013 | 1 May 2021 |
| | 10,000 | $40.83 | 23 May 2014 | 23 May 2022 |
| | 10,000 | $68.39 | 18 March 2015 | 18 March 2023 |
| | 10,557 | $65.60 | 20 May 2016 | 20 May 2024 |
| Professor William Hall | 3,000 | $32.37 | 1 May 2013 | 1 May 2021 |
| | 6,000 | $40.83 | 23 May 2014 | 23 May 2022 |
| | 10,000 | $68.39 | 18 March 2015 | 18 March 2023 |
| | 10,557 | $65.60 | 20 May 2016 | 20 May 2024 |
| Mary Pendergast | 10,000 | $40.83 | 23 May 2014 | 23 May 2022 |
| | 10,000 | $68.39 | 18 March 2015 | 18 March 2023 |
| | 10,557 | $65.60 | 20 May 2016 | 20 May 2024 |
| Professor Hugh Brady | 10,000 | $40.83 | 23 May 2014 | 23 May 2022 |
| | 10,000 | $68.39 | 18 March 2015 | 18 March 2023 |
| | 10,557 | $65.60 | 20 May 2016 | 20 May 2024 |
| Diarmaid Cunningham | 3,000 | $20.59 | 22 February 2012 | 22 February 2020 |
| | 2,510 | $32.37 | 1 May 2013 | 1 May 2021 |
| | 2,591 | $47.03 | 3 March 2014 | 3 March 2022 |
| | 3,559 | $48.67 | 17 March 2014 | 17 March 2022 |
| | 9,375 | $68.39 | 18 March 2015 | 18 March 2023 |
| | 9,189 | $71.95 | 4 March 2016 | 4 March 2024 |

## 9. Payroll and related benefits (continued)

The following Restricted Share Units ("RSUs") and Performance Share Units ("PSUs") have been awarded to the Directors, Executive Officer and Company Secretary:

| Name | RSUs | Award date | Vesting Date | PSUs[1] | Award Date | Vesting date |
|---|---|---|---|---|---|---|
| Ciaran Murray | 8,293 | 4 March 2016 | 4 March 2017 | 63,638 | 3 March 2014 | 3 March 2017 |
| | 8,471 | 18 March 2015 | 3 May 2017 | 42,358 | 18 March 2015 | 3 May 2018 |
| | 8,293 | 4 March 2016 | 4 March 2018 | 41,470 | 4 March 2016 | 4 March 2019 |
| | 8,472 | 18 March 2015 | 3 May 2018 | | | |
| | 8,296 | 4 March 2016 | 4 March 2019 | | | |
| Brendan Brennan | 1,965 | 4 March 2016 | 4 March 2017 | 10,179 | 3 March 2014 | 3 March 2017 |
| | 1,486 | 18 March 2015 | 3 May 2017 | 7,435 | 18 March 2015 | 3 May 2018 |
| | 1,965 | 4 March 2016 | 4 March 2018 | 9,827 | 4 March 2016 | 4 March 2019 |
| | 1,489 | 18 March 2015 | 3 May 2018 | | | |
| | 1,966 | 4 March 2016 | 4 March 2019 | | | |
| Dr. Steve Cutler | 4,423 | 4 March 2016 | 4 March 2017 | 32,125 | 3 March 2014 | 3 March 2017 |
| | 4,517 | 18 March 2015 | 3 May 2017 | 22,591 | 18 March 2015 | 3 May 2018 |
| | 4,423 | 4 March 2016 | 4 March 2018 | 22,117 | 4 March 2016 | 4 March 2019 |
| | 4,520 | 18 March 2015 | 3 May 2018 | | | |
| | 4,424 | 4 March 2016 | 4 March 2019 | | | |
| Diarmaid Cunningham | 865 | 3 March 2014 | 3 March 2017 | 5,183 | 3 March 2014 | 3 March 2017 |
| | 1,326 | 4 March 2016 | 4 March 2017 | 6,777 | 18 March 2015 | 3 May 2018 |
| | 1,355 | 18 March 2015 | 3 May 2017 | 6,635 | 4 March 2016 | 4 March 2019 |
| | 1,326 | 4 March 2016 | 4 March 2018 | | | |
| | 1,356 | 18 March 2015 | 3 May 2018 | | | |
| | 1,329 | 4 March 2016 | 4 March 2019 | | | |

*(1) Of the issued PSUs, performance conditions will determine how many of them vest and, if performance targets are exceeded, additional PSUs will be issued and vest in accordance with the terms of the relevant PSU award.*

*Directors' and Company share and share option transactions*

Details of transactions entered into by the Directors, Executive Officers and Company Secretary in shares and share options of the Company during the year ended 31 December 2016 were as follows:

**Share Options exercised and sold**

| Name | Number of Share Options | Average exercise price | Average Vest price |
|---|---|---|---|
| Dr. Steve Cutler | 27,921 | $35.57 | $76.38 |
| Brendan Brennan | 8,025 | $30.94 | $76.11 |
| Prof. William Hall | 8,500 | $36.35 | $83.21 |
| Dr. Ronan Lambe | 2,000 | $22.26 | $76.00 |
| Thomas Lynch | 6,000 | $24.50 | $70.76 |
| Diarmaid Cunningham | 9,910 | $29.33 | $73.16 |

## 9. Payroll and related benefits (continued)

### Shares sold

| | Number of Shares | Sales Price |
|---|---|---|
| Dr. John Climax | 400 | $84.13 |

### RSUs vested

| | Number of Shares | Average Vest Price |
|---|---|---|
| Dr. Steve Cutler | 91,594 | $67.45 |
| Brendan Brennan | 33,111 | $67.46 |
| Ciaran Murray | 214,218 | $68.31 |
| Diarmaid Cunningham | 14,768 | $67.61 |

### RSUs sold

| | Number of Shares | Average Sales Price |
|---|---|---|
| Dr. Steve Cutler | 73,768 | $70.31 |
| Brendan Brennan | 31,750 | $70.38 |
| Ciaran Murray | 244,216 | $72.61 |
| Diarmaid Cunningham | 14,860 | $71.56 |

The market price of the Company's ordinary shares during the year ended 31 December 2016 moved in the range of $62.31 to $85.74 (year ended 31 December 2015: in the range of $50.91 to $84.14). The closing share price at 31 December 2016 was $75.20 (at 31 December 2015 $77.70).

# Notes to Consolidated Financial Statements *(continued)*

*for the year ended 31 December 2016*

## 9. Payroll and related benefits (continued)

*Summary compensation table - Year ended 31 December 2016*

| Name | Year | Salary | Company pension contribution | Performance related compensation | All other compensation | Subtotal | Share-based payments **** | Directors' fees | Total compensation |
|---|---|---|---|---|---|---|---|---|---|
| | | $'000 | $'000 | $'000 | $'000 | $'000 | $'000 | $'000 | $'000 |
| Thomas Lynch* | 2016 | - | - | - | - | - | 397 | 161 | 558 |
| Declan McKeon** | 2016 | - | - | - | - | - | 145 | 285 | 430 |
| Ciaran Murray | 2016 | 1,307 | 163 | 623 | 39 | 2,132 | 8,671 | - | 10,803 |
| Dr. John Climax | 2016 | - | - | - | - | - | 145 | 77 | 222 |
| Ronan Lambe | 2016 | - | - | - | - | - | 145 | 77 | 222 |
| Prof. Dermot Kelleher | 2016 | - | - | - | - | - | 145 | 97 | 242 |
| Prof. William Hall | 2016 | - | - | - | - | - | 150 | 122 | 272 |
| Mary Pendergast | 2016 | - | - | - | - | - | 140 | 89 | 229 |
| Prof. Hugh Brady | 2016 | - | - | - | - | - | 140 | 64 | 204 |
| Dr. Steve Cutler | 2016 | 790 | 165 | 318 | 54 | 1,327 | 4,833 | - | 6,160 |
| Ronan Murphy*** | 2016 | - | - | - | - | - | - | 21 | 21 |
| **Total** | **2016** | **2,097** | **328** | **941** | **93** | **3,459** | **14,911** | **993** | **19,363** |

** Retired as Chairman on 31 March 2016. Resigned from the Board on 22 July 2016.*
*** Appointed as acting Chairman on 1 April 2016.*
**** Appointed to the Board on 18 October 2016.*
*****Share-based payments is the IFRS 2 expense related to share options, RSUs and PSUs. The aggregate amount of the gains earned by the Directors on the exercise of share options during the financial year is disclosed in Note 3 under 'Directors' emoluments'.*

# Notes to Consolidated Financial Statements *(continued)*

*for the year ended 31 December 2016*

## 9. Payroll and related benefits (continued)

*Summary compensation table - Year ended 31 December 2015*

| Name | Year | Salary | Company pension contribution | Performance related compensation** | All other compensation | Subtotal | Share-based payments **** | Directors' fees | Total compensation |
|---|---|---|---|---|---|---|---|---|---|
| | | $'000 | $'000 | $'000 | $'000 | $'000 | $'000 | $'000 | $'000 |
| Thomas Lynch | 2015 | - | - | - | - | - | 135 | 512 | 647 |
| Ciaran Murray | 2015 | 1,238 | 155 | 2,575 | 39 | 4,007 | 7,622 | - | 11,629 |
| Dr. John Climax | 2015 | - | - | - | - | - | 129 | 75 | 204 |
| Ronan Lambe | 2015 | - | - | - | - | - | 129 | 75 | 204 |
| Prof. Dermot Kelleher | 2015 | - | - | - | - | - | 129 | 96 | 225 |
| Declan McKeon | 2015 | - | - | - | - | - | 129 | 121 | 250 |
| Prof. William Hall | 2015 | - | - | - | - | - | 137 | 121 | 258 |
| Mary Pendergast | 2015 | - | - | - | - | - | 120 | 88 | 208 |
| Prof. Hugh Brady | 2015 | - | - | - | - | - | 120 | 63 | 183 |
| Dr. Steve Cutler * | 2015 | 766 | 201 | 1,622*** | 50 | 2,639 | 4,060 | - | 6,699 |
| **Total** | **2015** | **2,004** | **356** | **4,197** | **89** | **6,646** | **12,710** | **1,151** | **20,507** |

** Appointed to the Board in November 2015.*

*** Excludes $1.8 million and $0.8 million respectively for Ciaran Murray and Dr Steve Cutler paid during 2015 under the terms of the 2012 long-term incentive plan.*

**** Includes an amount of $386,000 payable in respect of the additional 2014 bonus plan.*

***** Share-based payments is the IFRS 2 expense related to share options, RSUs and PSUs. The aggregate amount of the gains earned by the Directors on the exercise of share options during the financial year is disclosed in Note 3 under 'Directors' emoluments'.*

## 10. Retirement benefit obligations

The Group operates a number of defined contribution schemes and two defined benefit pension schemes. The Group accounts for pensions in accordance with IAS 19R *Employee Benefits* ("IAS 19R").

### (i) Defined Contribution Schemes

Certain employees of the Group are eligible to participate in a defined contribution plan (the "Plan"). Participants in the Plan may elect to defer a portion of their pre-tax earnings into a pension plan, which is run by an independent party. The Group matches each participant's contributions typically at 6% of the participant's annual compensation. Contributions to this plan are recorded, as a remuneration expense in the Consolidated Income Statement. Contributions for the year ended 31 December 2016 and year ended 31 December 2015 were $20,952,000 and $20,439,000 respectively.

The Group's United States operations maintain a retirement plan (the "U.S. Plan") that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Participants in the U.S. Plan may elect to defer a portion of their pre-tax earnings, up to the Internal Revenue Service annual contribution limit. The Group matches 50% of each participant's contributions and each participant can contribute up to 6% of their annual compensation. Contributions to the U.S. Plan are recorded, in the year contributed, as an expense in the Consolidated Income Statement. Contributions for the year ended 31 December 2016 and year ended 31 December 2015 were $15,223,000 and $12,802,000 respectively.

### (ii) Defined Benefit Plans

*ICON Development Solutions Limited defined benefit pension plan*

One of the Group's subsidiaries, ICON Development Solutions Limited, which was acquired by the Group in 2003, operates a defined benefit pension plan in the United Kingdom for certain of its employees, which is now closed to new members.

The plan is managed externally and the related pension costs and liabilities are assessed in accordance with the advice of a professionally qualified actuary. Plan assets at 31 December 2016 and 31 December 2015 consist of units held in independently administered funds.

*Financial assumptions*

The following assumptions were used in determining the fair value of the plan assets and the present value of the projected benefit obligation at 31 December 2016:

| | **31 December 2016** | 31 December 2015 |
|---|---|---|
| Discount rate | **2.70%** | 4.00% |
| Inflation rate | **3.40%** | 3.20% |
| Future pension increases | **3.20%** | 3.10% |
| Future salary increases | **3.90%** | 3.70% |

The discount rate is determined by reference to UK long dated government and corporate bond yields at the reporting date. This is represented by the iboxx corporate bond over 15 year index plus 10 basis points. At 31 December 2016 the Company, with input from its actuarial advisors, refined its estimate of the discount rate used in calculating the benefit obligation and decreased the premium over iboxx from 30 basis points to 10 to reflect the change in the shape of the yield curve. The sensitivity of the defined benefit obligation to changes in the principal assumptions including the discount rate is shown below.

## 10. Retirement benefit obligations (continued)

The following assumptions were used at the commencement of the year in determining the net periodic pension cost for the year ended 31 December 2016:

| | **31 December 2016** | 31 December 2015 |
|---|---|---|
| Discount rate | **4.00%** | 3.60% |
| Future salary increases | **3.70%** | 3.60% |

*Mortality assumptions*

Assumptions regarding mortality experience are set based on actuarial advice in accordance with published statistics and experience. The mortality assumptions adopted at 31 December 2016 are 100% of the standard tables S2PxA, Year of Birth, no age rating for males and females, projected using CMI_2015 converging to 1.25% p.a.. These imply the following life expectancies, for persons retiring at age 62:

| | **31 December 2016** | 31 December 2015 |
|---|---|---|
| Male retiring in 2016 | **24.9 years** | 24.9 years |
| Female retiring in 2016 | **27.1 years** | 27.0 years |
| Male retiring in 2036 | **26.8 years** | 26.7 years |
| Female retiring in 2036 | **29.0 years** | 28.9 years |

*Consolidated Financial Statements*

Movement in the net benefit obligation recognised in non-current other liabilities was as follows:

| | **Present Value of Obligations $'000** | **Fair Value of Plan Assets $'000** | **Total $'000** |
|---|---|---|---|
| At 1 January 2016 | (27,369) | 23,367 | (4,002) |
| Current service costs | (75) | - | (75) |
| Interest expense/(income) | (1,017) | 869 | (148) |
| Past service cost | - | - | - |
| Expenses | (8) | - | (8) |
| | **(28,469)** | **24,236** | **(4,233)** |
| **Re-measurements** | | | |
| Experience adjustment | - | 4,992 | 4,992 |
| Gain or loss from change in demographic assumptions | - | - | - |
| Gain or loss from change in financial assumptions | (10,057) | - | (10,057) |
| | **(10,057)** | **4,992** | **(5,065)** |
| Exchange differences | 5,538 | (4,378) | 1,160 |
| **Contributions:** | | | |
| - Employers | - | 108 | 108 |
| - Plan participants | (22) | 22 | - |
| Benefit payments | 104 | (104) | - |
| | **82** | **26** | **108** |
| **At 31 December 2016** | **(32,906)** | **24,876** | **(8,030)** |

## 10. Retirement benefit obligations (continued)

| | Present Value of Obligations $'000 | Fair Value of Plan Assets $'000 | Total $'000 |
|---|---|---|---|
| At 1 January 2015 | (32,875) | 25,409 | (7,466) |
| Current service costs | (78) | - | (78) |
| Interest expense/(income) | (1,140) | 878 | (262) |
| Past service cost | - | - | - |
| | **(34,093)** | **26,287** | **(7,806)** |
| **Re-measurements** | | | |
| Experience adjustment | 577 | (600) | (23) |
| Gain or loss from change in demographic assumptions | 485 | - | 485 |
| Gain or loss from change in financial assumptions | 2,930 | - | 2,930 |
| | **3,992** | **(600)** | **3,392** |
| Exchange differences | 1,647 | (1,349) | 298 |
| **Contributions:** | | | |
| - Employers | - | 114 | 114 |
| - Plan participants | (26) | 26 | - |
| Benefit payments | 1,111 | (1,111) | - |
| | **1,085** | **(971)** | **114** |
| **At 31 December 2015** | **(27,369)** | **23,367** | **(4,002)** |

Re-measurements are recognised in the Consolidated Statement of Other Comprehensive Income as follows:

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| Return on plan assets (excl. amounts included in interest income/expense) | **4,992** | (23) |
| Gain or loss from change in demographic assumptions | **-** | 485 |
| Gain or loss from change in financial assumptions | **(10,057)** | 2,930 |
| **Comprehensive income at end of year** | **(5,065)** | 3,392 |

Defined benefit pension expense recognised in the Consolidated Income Statement was as follows:

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| Current service cost recognised in profit or loss | **75** | 78 |
| Net interest expense recognised in profit or loss | **148** | 262 |
| Expenses | **8** | - |
| Past service cost | **-** | - |
| **Net periodic pension cost** | **231** | 340 |

## 10. Retirement benefit obligations (continued)

***Plan Assets Fair Value***

The fair value of plan assets at 31 December 2016 is analysed as follows:

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Unit funds | **24,876** | 23,367 |

The plan's assets do not include any of the Group's own financial instruments, nor any property occupied by, or other assets used by the Group.

At 31 December 2016 the long-term expected return on corporate bonds and gilts (fixed interest and index linked) was determined by reference to bond yields and gilt yields.

The underlying asset split of the funds at 31 December 2016 and 31 December 2015 was as follows:

| | **31 December 2016** | 31 December 2015 |
|---|---|---|
| Equities | **-** | - |
| Corporate Bonds | **25.00%** | 26.00% |
| Gilts | **75.00%** | 74.00% |

The assets of the scheme are invested with Legal and General and held in a combination of the Active Corporate Bond over 10 Year fund, Gilt, and Index Linked Gilt funds. The overall investment strategy is that approximately 75% of investments are in government bonds (both fixed interest and index linked) and approximately 25% of investments are held in corporate bonds. This results in a concentration of investments in bond type assets, although invested in a number of different bond funds.

*Sensitivity assumptions*

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

| | **Change in Assumption** | **Change in Liabilities** |
|---|---|---|
| Discount Rate | Decrease of 0.25% p.a. | Increase by 6.7% |
| Rate of Inflation | Increase of 0.25% p.a. | Increase by 1.3% |
| Rate of Salary Growth | Increase of 0.25% p.a. | Increase by 0.2% |
| Rate of Mortality | Increase in life expectancy of 1 year | Increase by 3.4% |

The sensitivities shown above are approximate. Each sensitivity considers one change in isolation. The inflation sensitivity includes the impact of changes to the assumptions for revaluation, pension increases and salary growth. The average duration of the defined benefit obligation at the period ending 31 December 2016 is 27 years.

## 10. Retirement benefit obligations (continued)

The plan typically exposes the Company to actuarial risks such as investment risk, interest rate risk, salary growth risk, mortality risk and longevity risk. A decrease in corporate bond yields, a rise in inflation or an increase in life expectancy would result in an increase to plan liabilities. This would detrimentally impact the balance sheet position and may give rise to increased charges in future income statements. This effect would be partially offset by an increase in the value of the plan's bond holdings, and in qualifying death in service insurance policies that cover mortality risk. Additionally, caps on inflationary increases are in place to protect the plan against extreme inflation.

*Cash flows and Maturity Profiles*

The Group expects to contribute approximately $0.1 million of normal contribution to the defined benefit pension scheme for the year ended 31 December 2017. The average duration of the defined benefit obligation at the period ending 31 December 2016 is 27 years.

*Aptiv Solutions Pension Scheme*

On 7 May 2014, the Company acquired 100% of the common stock of Aptiv Solutions ("Aptiv"). The acquisition of Aptiv was accounted for as a business combination in accordance with IFRS 3 *Business Combinations*. The Company has a defined benefit plan covering its employees in Switzerland as mandated by the Swiss government. Benefits are based on the employee's years of service and compensation. Benefits are paid directly by the Company when they become due, in conformity with the funding requirements of applicable government regulations. The plan is managed externally and the related pension costs and liabilities are assessed in accordance with the advice of a professionally qualified actuary. Plan assets at 31 December 2016 and 31 December 2015 consist of units held in independently administered funds.

*Financial assumptions*

The following assumptions were used in determining the fair value of the plan assets and the present value of the projected benefit obligation at 31 December 2016:

| | **31 December 2016** | 31 December 2015 |
|---|---|---|
| Discount rate | **0.75%** | 0.95% |
| Inflation rate | **1.00%** | 1.00% |
| Future pension increases | **1.00%** | 1.00% |
| Future salary increases | **2.00%** | 2.00% |

The discount rate is determined by reference to Swiss corporate bond yields at the reporting date.

The following assumptions were used at the commencement of the year in determining the net periodic pension cost for the year ended 31 December 2016:

| | **31 December 2016** | 31 December 2015 |
|---|---|---|
| Discount rate | **0.95%** | 1.35% |
| Future salary increases | **2.00%** | 2.00% |

## 10. Retirement benefit obligations (continued)

*Mortality assumptions*

Assumptions regarding mortality experience are set based on actuarial advice in accordance with published statistics and experience. The mortality assumptions adopted at 31 December 2016 are determined using the BVG 2015 generational table, where the mortality rates are projected forward for each individual based on their age to reflect future mortality improvements. These tables imply the following life expectancies, for males retiring at age 65 and females retiring at age 64:

| | **31 December 2016** | 31 December 2015 |
|---|---|---|
| Male retiring in 2016 | **22.3 years** | 22.0 years |
| Female retiring in 2016 | **25.2 years** | 22.9 years |
| Male retiring in 2036 | **24.2 years** | 23.7 years |
| Female retiring in 2036 | **27.1 years** | 24.7 years |

Movement in the net benefit obligation recognised in non-current other liabilities was as follows:

| | **Present Value of Obligations $'000** | **Fair Value of Plan Assets $'000** | **Total $'000** |
|---|---|---|---|
| At 1 January 2016 | (8,537) | 5,350 | (3,187) |
| Current service costs | (352) | - | (352) |
| Interest expense/(income) | (82) | 48 | (34) |
| Past service cost | 88 | - | 88 |
| | **(8,883)** | **5,398** | **(3,485)** |
| **Re-measurements** | | | |
| Experience adjustment | 996 | 1,233 | 2,229 |
| Gain or loss from change in demographic assumptions | 381 | - | 381 |
| Gain or loss from change in financial assumptions | (220) | - | (220) |
| | **1,157** | **1,233** | **2,390** |
| Exchange differences | 92 | (114) | (22) |
| **Contributions:** | | | |
| - Employers | - | 195 | 195 |
| - Plan participants | (150) | 150 | - |
| Benefit payments | 856 | (856) | - |
| | **706** | **(511)** | **195** |
| **At 31 December 2016** | **(6,928)** | **6,006** | **(922)** |

**10. Retirement benefit obligations (continued)**

| | Present Value of Obligations $'000 | Fair Value of Plan Assets $'000 | Total $'000 |
|---|---|---|---|
| At 1 January 2015 | (8,884) | 7,061 | (1,823) |
| Current service costs | (402) | - | (402) |
| Interest expense/(income) | (159) | 93 | (66) |
| Past service cost | - | - | - |
| | **(9,445)** | **7,154** | **(2,291)** |
| **Re-measurements** | | | |
| Experience adjustment | 913 | (1,075) | (162) |
| Gain or loss from change in demographic assumptions | - | - | - |
| Gain or loss from change in financial assumptions | (994) | - | (994) |
| | **(81)** | **(1,075)** | **(1,156)** |
| Exchange differences | 59 | 7 | 66 |
| **Contributions:** | | | |
| - Employers | - | 194 | 194 |
| - Plan participants | (216) | 216 | - |
| Benefit payments | 1,146 | (1,146) | - |
| | 930 | (736) | 194 |
| **At 31 December 2015** | **(8,537)** | **5,350** | **(3,187)** |

Re-measurements are recognised in the Consolidated Statement of Other Comprehensive Income as follows:

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| Return on Plan Assets (excl. amounts included in interest income/expense) | **2,229** | (162) |
| Gain or loss from change in demographic assumptions | **381** | - |
| Gain or loss from change in financial assumptions | **(220)** | (994) |
| **Comprehensive income at end of year** | **2,390** | (1,156) |

Defined benefit pension expense recognised in the Consolidated Income Statement was as follows:

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| Current service cost recognised in profit or loss | **352** | 402 |
| Net interest expense recognised in profit or loss | **34** | 66 |
| Past service cost | **(88)** | - |
| **Net periodic pension cost** | **298** | 468 |

## 10. Retirement benefit obligations (continued)

*Plan Assets Fair Value*

The fair value of plan assets at 31 December 2016 is analysed as follows:

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Unit funds | **6,006** | 5,350 |

The assets of the scheme are invested in an insured plan with Swiss Life and held in a combination of debt securities, equity securities and in real estate. There is no self-investment in employer related assets.

*Sensitivity assumptions*

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

| | **Change in Assumption** | **Change in Liabilities** |
|---|---|---|
| Discount Rate | Decrease of 0.25% p.a. | Increase by 4.8% |
| Rate of Inflation | Increase of 0.25% p.a. | Increase by 2.1% |
| Rate of Salary Growth | Increase of 0.25% p.a. | Increase by 0.4% |
| Rate of Mortality | Decrease in mortality rate of 1.00% p.a. | Increase by 0.1% |

The sensitivities shown above are approximate. Each sensitivity considers one change in isolation. The inflation sensitivity includes the impact of changes to the assumptions for revaluation, pension increases and salary growth. The average duration of the defined benefit obligation at the period ending 31 December 2016 is 19 years.

The plan typically exposes the Company to actuarial risks such as investment risk, interest rate risk, salary growth risk, mortality risk and longevity risk. A decrease in corporate bond yields, a rise in inflation or an increase in life expectancy would result in an increase to plan liabilities. This would detrimentally impact the balance sheet position and may give rise to increased charges in future income statements. This effect would be partially offset by an increase in the value of the plan's bond holdings, and in qualifying death in service insurance policies that cover mortality risk. Additionally, caps on inflationary increases are in place to protect the plan against extreme inflation.

## 11. Share based payment

*Share Options*

On 21 July 2008 the Company adopted the Employee Share Option Plan 2008 (the "2008 Employee Plan") pursuant to which the Compensation and Organisation Committee of the Company's Board of Directors may grant options to any employee, or any director holding a salaried office or employment with the Company or a Subsidiary for the purchase of ordinary shares. On the same date, the Company also adopted the Consultants Share Option Plan 2008 (the "2008 Consultants Plan"), pursuant to which the Compensation and Organisation Committee of the Company's Board of Directors may grant options to any consultant, adviser or non-Executive Director retained by the Company or any Subsidiary for the purchase of ordinary shares.

On 14 February 2017 both the 2008 Employee Plan and the 2008 Consultants Plan (together the "2008 Option Plans") were amended and restated in order to increase the number of options that can be issued under the 2008 Consultants Plan from 400,000 to 1 million and to extend the date for options to be granted under the 2008 Option Plans.

## 11. Share based payments (continued)

An aggregate of 6.0 million ordinary shares have been reserved under the 2008 Employee Plan, as reduced by any shares issued or to be issued pursuant to options granted under the 2008 Consultants Plan, under which a limit of 1 million shares applies. Further, the maximum number of ordinary shares with respect to which options may be granted under the 2008 Employee Option Plan, during any calendar year to any employee shall be 400,000 ordinary shares. There is no individual limit under the 2008 Consultants Plan. No options may be granted under the 2008 Option Plans after 14 February 2027.

Each option granted under the 2008 Employees Plan or the 2008 Consultants Plan (together the "2008 Option plans") will be evidenced by a Stock Option Agreement between the optionee and the Company. The exercise price will be specified in each Stock Option Agreement, however option prices will not be less than 100% of the fair market value of an ordinary share on the date the option is granted.

On 17 January 2003 the Company adopted the Share Option Plan 2003 ("the 2003 Plan"), pursuant to which the Compensation and Organisation Committee of the Company's Board of Directors could grant options to employees of the Company or its subsidiaries for the purchase of ordinary shares. Each grant of an option under the 2003 Plan was to be evidenced by a Stock Option Agreement between the individual and the Company. The exercise price was to be specified in each Stock Option Agreement; however option prices could not be less than 100% of the fair market value of an ordinary share on the date the option was granted.

An aggregate of 6.0 million ordinary shares were reserved under the 2003 Plan; and, in no event could the number of ordinary shares that may be issued pursuant to options awarded under the 2003 Plan exceed 10% of the outstanding shares, as defined in the 2003 Plan, at the time of the grant. Further, the maximum number of ordinary shares with respect to which options could be granted under the 2003 Plan during any calendar year to any employee was 400,000 ordinary shares. The 2003 Share Option Plan expired on 17 January 2013. No new options may be granted under this plan.

Share option awards are granted with an exercise price equal to the market price of the Company's ordinary shares at date of grant. Share options typically vest over a period of five years from date of grant and expire eight years from date of grant.

Set out below is a summary of the total number of options outstanding and number of options available to grant under each plan as at 31 December 2016:

| | **Outstanding** | | **Available to Grant** | |
|---|---|---|---|---|
| | **31 December 2016** | 31 December 2015 | **31 December 2016** | 31 December 2015 |
| 1998 Long Term Incentive Plan | **-** | - | **-** | - |
| 2003 Stock Option Plan | **179,068** | 362,382 | **-** | - |
| 2008 Stock Option Plans | **1,287,376** | 1,264,200 | **3,513,068** | 3,753,896 |
| **Total** | **1,466,444** | 1,626,582 | **3,513,068** | 3,753,896 |

*The 1998 Long Term Incentive Plan expired on 14 January 2008 and no further options may be granted under this plan.*
*The 2003 Share Option Plan expired on 17 January 2013 and no further options may be granted under this plan.*

## 11. Share based payments (continued)

The total number of share options outstanding and exercisable at 31 December 2016 is as follows:

| | Number of Options | Weighted Average Exercise Price |
|---|---|---|
| Outstanding at 31 December 2014 | **2,227,700** | **$28.00** |
| Granted | 259,059 | $68.25 |
| Exercised | (773,753) | $27.13 |
| Forfeited | (86,424) | $27.32 |
| Outstanding at 31 December 2015 | **1,626,582** | **$34.87** |
| Granted | 256,191 | $69.61 |
| Exercised | (393,240) | $25.79 |
| Forfeited | (23,089) | $29.74 |
| **Outstanding at 31 December 2016** | **1,466,444** | **$43.45** |
| **Exercisable at 31 December 2016** | **651,574** | **$29.80** |

The weighted average market price of the Company’s shares on date of exercise of share options during the year ended 31 December 2016 was $75.74 (31 December 2015: $70.61).

## 11. Share based payments (continued)

At 31 December 2016, the range of exercise prices and weighted average remaining contractual life of outstanding and exercisable options was as follows:

| | Options Outstanding | | | Options Exercisable | |
|---|---|---|---|---|---|
| **Range Exercise Price** | **Number of Shares** | **Weighted Average Remaining Contractual Life** | **Weighted Average Exercise Price** | **Number of Shares** | **Weighted Average Exercise Price** |
| $15.84 | 50,000 | 0.32 | $15.84 | 50,000 | $15.84 |
| $16.80 | 60,000 | 2.83 | $16.80 | 60,000 | $16.80 |
| $17.17 | 6,000 | 2.85 | $17.17 | 6,000 | $17.17 |
| $20.28 | 107,588 | 2.16 | $20.28 | 107,588 | $20.28 |
| $20.59 | 33,000 | 3.14 | $20.59 | 7,200 | $20.59 |
| $22.26 | 2,160 | 0.15 | $22.26 | 2,160 | $22.26 |
| $22.30 | 173,642 | 3.32 | $22.30 | 112,061 | $22.30 |
| $23.66 | 3,520 | 3.57 | $23.66 | 1,910 | $23.66 |
| $24.46 | 60,816 | 1.17 | $24.46 | 60,816 | $24.46 |
| $26.20 | 450 | 1.38 | $26.20 | 450 | $26.20 |
| $26.71 | 4,450 | 3.69 | $26.71 | 3,560 | $26.71 |
| $29.45 | 3,000 | 1.32 | $29.45 | 3,000 | $29.45 |
| $32.37 | 165,865 | 4.33 | $32.37 | 95,457 | $32.37 |
| $36.22 | 20,178 | 4.46 | $36.22 | 8,443 | $36.22 |
| $37.90 | 5,720 | 4.93 | $37.90 | 1,600 | $37.90 |
| $40.83 | 81,658 | 5.39 | $40.83 | 24,646 | $40.83 |
| $47.03 | 63,813 | 5.17 | $47.03 | 15,693 | $47.03 |
| $48.67 | 118,493 | 5.21 | $48.67 | 22,992 | $48.67 |
| $51.35 | 4,030 | 5.60 | $51.35 | 1,612 | $51.35 |
| $65.60 | 93,534 | 7.38 | $65.60 | 10,557 | $65.60 |
| $66.47 | 11,931 | 6.39 | $66.47 | 1,417 | $66.47 |
| $66.97 | 3,118 | 6.45 | $66.97 | 623 | $66.97 |
| $68.39 | 231,687 | 6.18 | $68.39 | 53,789 | $68.39 |
| $71.95 | 161,791 | 7.17 | $71.95 | - | $71.95 |
| **$15.84 - $71.95** | **1,466,444** | **4.67** | **$43.45** | **651,574** | **$29.80** |

## 11. Share based payments (continued)

*Share option fair values*

The overall weighted average fair value of share options granted by the Company during the year ended 31 December 2016 was $21.04 based on the following grants:

| Grant Date | Number of Shares | Weighted Average Exercise Price |
|---|---|---|
| 4 Mar 16 | 161,791 | $71.95 |
| 20 May 16 | 94,400 | $65.60 |
| | 256,191 | $69.61 |

*Share option fair values*

The overall weighted average fair value of share options granted by the Company during the year ended 31 December 2015 was $20.92 based on the following grants:

| Grant Date | Number of Shares | Weighted Average Exercise Price |
|---|---|---|
| 18 Mar 15 | 239,972 | $68.39 |
| 22 May 15 | 15,969 | $66.47 |
| 15 Jun 15 | 3,118 | $66.97 |
| | **259,059** | **$68.25** |

*Fair value of share options – Assumptions*

The fair values of options granted during the year ended 31 December 2016 and the year ended 31 December 2015 were calculated using a binomial option-pricing-model, using the following assumptions:

| | **Year ended 31 December 2016** | Year ended 31 December 2015 |
|---|---|---|
| Weighted average share price | **$69.61** | $68.25 |
| Weighted average exercise price | **$69.61** | $68.25 |
| Expected volatility (1) | **30.0%** | 29.7% |
| Expected dividend yield | **-** | - |
| Risk-free rate (2) | **1.5%-1.8%** | 1.6%-2.2% |
| Rate of forced early exercise | **10% p.a.** | 10% p.a. |
| Minimum gain for voluntary early exercise | **25% of exercise price** | 25% of exercise price |
| Rate of voluntary early exercise at minimum gain | **75% per annum** | 75% per annum |

(1) Expected volatility has been determined based upon the volatility of the Company's share price over a period which is commensurate with the expected term of the options granted.
(2) Risk-free rate is dependent on the grant date.

## 11. Share based payments (continued)

*Restricted share units*

On 21 July 2008 the Company adopted the 2008 Employees Restricted Share Unit Plan (the "2008 RSU Plan") pursuant to which the Compensation and Organisation Committee of the Company's Board of Directors may select any employee, or any director holding a salaried office or employment with the Company or a Subsidiary to receive an award under the plan. An aggregate of 1.0 million ordinary shares have been reserved for issuance under the 2008 RSU Plan. The shares are awarded at zero cost and vest over a service period. Awards under the 2008 RSU Plan may be settled in cash or shares at the option of the Company.

On 23 April 2013 the Company adopted the 2013 Employees Restricted Share Unit and Performance Share Unit Plan (the "2013 RSU Plan") pursuant to which the Compensation and Organisation Committee of the Company's Board of Directors may select any employee, or any Director holding a salaried office or employment with the Company, or a Subsidiary to receive an award under the plan. On 11 May 2015 the 2013 RSU Plan was amended and restated in order to increase the number of shares that can be issued under the RSU Plan by 2.5 million shares. Accordingly, an aggregate of 4.1 million ordinary shares have been reserved for issuance under the 2013 RSU Plan. The shares are awarded at zero cost and vest over a service period. Awards under the 2013 RSU Plan may be settled in cash or shares at the option of the Company.

The Company has awarded RSUs and PSUs to certain key individuals of the Group. The fair value of RSUs is based on the share price at the date of grant, with the expense spread over the vesting period. The following table summarises RSU and PSU activity for the year ended 31 December 2016:

| | **RSU Outstanding Number of Shares** | **Weighted Average Fair Value** | **PSU Outstanding Number of Shares** | **Weighted Average Fair Value** |
|---|---|---|---|---|
| Outstanding at 31 December 2015 | 1,067,613 | $48.30 | 901,773 | $48.33 |
| Awarded | 391,196 | $67.45 | 247,992 | $71.58 |
| Shares Vested | (300,019) | $36.13 | (311,492) | $33.09 |
| Forfeited | (133,306) | $52.36 | (7,750) | $56.58 |
| **Outstanding at 31 December 2016** | 1,025,484 | $58.64 | 830,523 | $60.73 |

The PSUs vest based on service and specified EPS targets over the period 2013 – 2016, 2014 – 2017, 2015 – 2018 and 2016 - 2019. Since 2013, the Company has awarded a total of 421,079 PSUs (net of forfeitures and vested shares). Further PSUs up to a total of 409,444 PSUs may also be awarded depending upon actual EPS outturn from 2013 to 2019.

*Share based payment expense*

Operating profit for the year ended 31 December 2016 is stated after charging $40.3 million in respect of share based payment expense. Share based payment expense has been allocated as follows:

| | **Year Ended 31 December 2016 $'000** | Year Ended 31 December 2015 $'000 |
|---|---|---|
| Direct costs | **22,211** | 18,286 |
| Other operating expenses | **18,099** | 14,901 |
| **Total** | **40,310** | 33,187 |

# Notes to Consolidated Financial Statements *(continued)*

*for the year ended 31 December 2016*

## 12. Property, Plant and Equipment

| | Land $'000 | Buildings $'000 | Leasehold improvements $'000 | Computer equipment $'000 | Office furniture & fixtures $'000 | Laboratory equipment $'000 | Motor vehicles $'000 | Total $'000 |
|---|---|---|---|---|---|---|---|---|
| **Cost** | | | | | | | | |
| At 1 January 2016 | 4,844 | 63,325 | 31,092 | 93,271 | 57,389 | 19,935 | 19 | 269,875 |
| Additions | - | - | 917 | 8,863 | 6,127 | 1,046 | 4 | 16,957 |
| Disposals | - | - | (490) | (167) | (1,180) | (472) | (8) | (2,317) |
| Arising on acquisition | - | - | 113 | 194 | 41 | - | - | 348 |
| Foreign exchange movement | 146 | (2,437) | (898) | (1,115) | (871) | (199) | - | (5,374) |
| **At 31 December 2016** | **4,990** | **60,888** | **30,734** | **101,046** | **61,506** | **20,310** | **15** | **279,489** |
| **Depreciation** | | | | | | | | |
| At 1 January 2016 | - | 14,435 | 22,317 | 76,754 | 45,435 | 12,538 | 7 | 171,486 |
| Charge for year | - | 1,394 | 2,808 | 9,875 | 3,642 | 1,895 | - | 19,614 |
| Eliminated on disposal | - | - | (445) | (164) | (1,128) | (424) | (5) | (2,166) |
| Foreign exchange movement | - | (376) | (768) | (947) | (672) | (164) | - | (2,927) |
| **At 31 December 2016** | **-** | **15,453** | **23,912** | **85,518** | **47,277** | **13,845** | **2** | **186,007** |
| **Net book value** | | | | | | | | |
| **At 31 December 2016** | **4,990** | **45,435** | **6,822** | **15,528** | **14,229** | **6,465** | **13** | **93,482** |
| At 31 December 2015 | 4,844 | 48,890 | 8,775 | 16,517 | 11,954 | 7,397 | 12 | 98,389 |

Depreciation expense of $19.6 million (31 December 2015: $21.9 million) has been charged to “other operating expenses” in the income statement.

## 12. Property, Plant and Equipment (continued)

| | Land $'000 | Buildings $'000 | Leasehold improvements $'000 | Computer equipment $'000 | Office furniture & fixtures $'000 | Laboratory equipment $'000 | Motor vehicles $'000 | Total $'000 |
|---|---|---|---|---|---|---|---|---|
| **Cost** | | | | | | | | |
| At 1 January 2015 | 4,428 | 70,936 | 30,611 | 87,583 | 56,866 | 17,526 | 20 | 267,970 |
| Additions | - | 439 | 1,858 | 8,785 | 3,696 | 3,655 | - | 18,433 |
| Disposals | - | - | (70) | (457) | (927) | (585) | - | (2,039) |
| Arising on acquisition | - | 686 | 27 | 421 | 54 | - | - | 1,188 |
| Foreign exchange movement | 416 | (8,736) | (1,334) | (3,061) | (2,300) | (661) | (1) | (15,677) |
| **At 31 December 2015** | **4,844** | **63,325** | **31,092** | **93,271** | **57,389** | **19,935** | **19** | **269,875** |
| **Depreciation** | | | | | | | | |
| At 1 January 2015 | - | 13,853 | 20,895 | 70,399 | 43,241 | 9,745 | 8 | 158,141 |
| Charge for year | - | 1,591 | 2,539 | 9,260 | 4,802 | 3,695 | - | 21,887 |
| Eliminated on disposal | - | - | (50) | (426) | (923) | (585) | - | (1,984) |
| Foreign exchange movement | - | (1,009) | (1,067) | (2,479) | (1,685) | (317) | (1) | (6,558) |
| **At 31 December 2015** | **-** | **14,435** | **22,317** | **76,754** | **45,435** | **12,538** | **7** | **171,486** |
| **Net book value** | | | | | | | | |
| **At 31 December 2015** | **4,844** | **48,890** | **8,775** | **16,517** | **11,954** | **7,397** | **12** | **98,389** |
| At 31 December 2014 | 4,428 | 57,083 | 9,716 | 17,184 | 13,625 | 7,781 | 12 | 109,829 |

Depreciation expense of $21.9 million (31 December 2014: $23.1 million) has been charged to "other operating expenses" in the income statement.

# Notes to Consolidated Financial Statements *(continued)*

*for the year ended 31 December 2016*

## 13. Intangible assets – goodwill and other

| | Computer Software $'000 | Customer Relationships $'000 | Volunteer List $'000 | Order Backlog $'000 | Technology Asset $'000 | Trade Name $'000 | Non-Competes $'000 | Goodwill $'000 | Total $'000 |
|---|---|---|---|---|---|---|---|---|---|
| **Cost** | | | | | | | | | |
| At 1 January 2016 | 165,483 | 91,819 | 1,325 | 14,737 | 8,527 | 1,039 | 487 | 602,442 | 885,859 |
| Additions | 25,644 | - | - | - | - | - | - | - | 25,644 |
| Disposal | (1) | - | - | - | - | - | - | - | (1) |
| Arising on acquisition | 590 | 8,644 | - | - | - | - | - | 34,576 | 43,810 |
| Prior period acquisition | - | (3,322) | - | 2,948 | - | - | - | 7,689 | 7,315 |
| Foreign exchange movement | (353) | (1,225) | - | (154) | (294) | (33) | (6) | (14,611) | (16,676) |
| **31 December 2016** | **191,363** | **95,916** | **1,325** | **17,531** | **8,233** | **1,006** | **481** | **630,096** | **945,951** |
| **Amortisation** | | | | | | | | | |
| At 1 January 2016 | 113,654 | 33,367 | 1,325 | 10,538 | 5,087 | 1,027 | 462 | - | 165,460 |
| Amortised in the year | 22,511 | 11,673 | - | 4,539 | 1,162 | 58 | 18 | - | 39,961 |
| Disposal | (1) | - | - | - | - | - | - | - | (1) |
| Foreign exchange movement | (287) | (922) | - | (147) | (218) | (81) | (6) | - | (1,661) |
| **At 31 December 2016** | **135,877** | **44,118** | **1,325** | **14,930** | **6,031** | **1,004** | **474** | **-** | **203,759** |
| **Net book value** | | | | | | | | | |
| **At 31 December 2016** | **55,486** | **51,798** | **-** | **2,601** | **2,202** | **2** | **7** | **630,096** | **742,192** |
| At 31 December 2015 | 51,829 | 58,452 | - | 4,199 | 3,440 | 12 | 25 | 602,442 | 720,399 |

# Notes to Consolidated Financial Statements *(continued)*

*for the year ended 31 December 2016*

## 13. Intangible assets – goodwill and other (continued)

| | Computer Software $'000 | Customer Relationships $'000 | Volunteer List $'000 | Order Backlog $'000 | Technology Asset $'000 | Trade Name $'000 | Non-Competes $'000 | Goodwill $'000 | Total $'000 |
|---|---|---|---|---|---|---|---|---|---|
| **Cost** | | | | | | | | | |
| At 1 January 2015 | 134,158 | 59,885 | 1,325 | 12,368 | 9,522 | 1,157 | 491 | 478,070 | 696,976 |
| Additions | 31,297 | - | - | - | - | - | - | - | 31,297 |
| Disposal | (2) | - | - | - | - | - | - | - | (2) |
| Arising on acquisition | 623 | 33,011 | - | 2,521 | - | - | - | 133,123 | 169,278 |
| Prior period acquisition | - | - | - | - | - | - | - | 3,681 | 3,681 |
| Foreign exchange movement | (593) | (1,077) | - | (152) | (995) | (118) | (4) | (12,432) | (15,371) |
| **31 December 2015** | **165,483** | **91,819** | **1,325** | **14,737** | **8,527** | **1,039** | **487** | **602,442** | **885,859** |
| **Amortisation** | | | | | | | | | |
| At 1 January 2015 | 95,810 | 23,090 | 1,325 | 5,639 | 4,395 | 886 | 423 | - | 131,568 |
| Amortised in the year | 18,323 | 10,969 | - | 5,051 | 1,168 | 237 | 42 | - | 35,790 |
| Disposal | (2) | - | - | - | - | - | - | - | (2) |
| Foreign exchange movement | (477) | (692) | - | (152) | (476) | (96) | (3) | - | (1,896) |
| **At 31 December 2015** | **113,654** | **33,367** | **1,325** | **10,538** | **5,087** | **1,027** | **462** | **-** | **165,460** |
| **Net book value** | | | | | | | | | |
| **At 31 December 2015** | **51,829** | **58,452** | **-** | **4,199** | **3,440** | **12** | **25** | **602,442** | **720,399** |
| At 31 December 2014 | 38,348 | 36,795 | - | 6,729 | 5,127 | 271 | 68 | 478,070 | 565,408 |

Amortisation expense of $40.0 million (31 December 2015: $35.8 million) has been charged to 'other operating expenses' in the income statement.
Amortisation expense of $35.8 million (31 December 2014: $29.4 million) has been charged to 'other operating expenses' in the income statement.

## 13. Intangible assets – goodwill and other (continued)

***Impairment review of goodwill***

Goodwill acquired through business combinations has been allocated to the Group's clinical research cash-generating unit ("CGU"). The CGU identified represents the lowest level within the Group at which goodwill is monitored and are not larger than the operating segment determined in accordance with IFRS 8 *Operating Segments*.

The Group has identified one CGU in accordance with the provisions of IAS 36 *Impairment of Assets* as follows:

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Goodwill** | | |
| Clinical research | **630,096** | 602,442 |
| | **630,096** | 602,442 |

*Impairment testing methodology and results*

Goodwill is subject to impairment testing on an annual basis or more frequently if facts or circumstances warrant such a review.

The recoverable amount of the CGU is determined using a value-in-use computation based upon discounted net present value cash flow projections for the CGU. The cash flow projections are for a period of five years forward together with a terminal value calculated in accordance with the Gordon growth model. In calculating the terminal value a long-term growth rate of 2% has been applied to the estimated maintainable cash flow in the terminal year.

Management's estimates of future cash flows are based upon current budgets and strategic plans and are reflective of anticipated growth rates within the CRO industry, expected growth in the Group's market share and reflective of past experience. Key assumptions applied in determining expected future cash flows for these plans include management's estimate of future profitability, replacement capital expenditure requirements, trade working capital investment needs and tax considerations. The Group's cash flow projections are adjusted each year for actual and expected changes in performance.

The following assumptions were applied in determining the five year projected cash flows of the Clinical Research CGU at 31 December 2016:

| | **31 December 2016** | 31 December 2015 |
|---|---|---|
| Expected revenue growth rate | **6%** | 9% |
| Expected growth rate for operating costs | **5.5%** | 7% |
| Expected effective tax rate | **14%** | 14% |
| Expected movement in creditors | **5.5%** | 7% |
| Expected days sales outstanding | **50 days** | 45 days |
| Expected capital expenditure growth rate | **2%** | 3% |
| Discount rate | **10%** | 8% |

**Days sales outstanding (DSO) is a measure of the number of days in the period that the company takes to collect revenue. DSO is calculated based on trade debtors less payments on account divided by gross revenue multiplied by number of days in the period.*

## 13. Intangible assets – goodwill and other (continued)

Expected revenue growth and the expected growth in operating costs are determined based upon the expected growth rates used in preparing the Group's budgets and strategic plans. In estimating budget revenue, consideration is given to current levels of backlog (i.e. the value of new business awards not yet recognised in revenue) and the estimated timeframe over which this is expected to be recognised within revenue, together with an estimate of revenue expected to be generated from new awards not currently within backlog. In estimating revenue from new awards consideration is given to current RFP (request for proposals) volumes, expected growth rates in both the CRO industry and the Group's market share, and of past experience. In estimating budgeted operating costs, consideration is given to required staffing levels, project related costs, facility and information technology costs and other costs. Staff costs and project related costs generally increase in line with revenue and are therefore estimated based on revenue growth expectations, while facility and information costs and other costs are relatively fixed and are therefore projected based upon a lower growth rate. An expected long term average tax rate of 14% has been applied in determining the projected after tax cash flows.

Working capital investment needs are determined based upon anticipated increases in the Group's debtors and creditors. Debtors are expected to increase in line with increases in the Group's DSO. DSO is generally a function of both the timing of contract fee instalments over a study or trial duration and credit terms afforded to individual customers. The DSO used in conducting the impairment review is reflective of current and anticipated trends in the Group's DSO. Expected long term DSOs for the Group are anticipated to be in the range of 45 to 55 days. Creditors are expected to increase in line with operating costs. Capital expenditure is expected to increase in line with the Group's projected capital expenditure investment targets.

A pre-tax discount rate of 10% (2015: 8%) has been applied to the projected cash flows of the CGU in determining its value-in-use. This rate is reflective of both the time value of money and risks specific to the CGU. The discount rate is based upon the Group's weighted average cost of capital which has been determined by applying the Group's long term optimal capital structure to its costs of debt and cost of equity. The Group's cost of debt has been calculated by applying an appropriate margin over the risk free interest rate. The Group's cost of equity has been calculated using the capital asset pricing model and includes an appropriate equity risk premium over the available risk free interest rate.

The excess of the value-in-use of the CGU at 31 December 2016, based on the assumptions above, has been calculated as follows:

| | **31 December 2016 $'m** | 31 December 2015 $'m |
|---|---|---|
| Value-in use (present value of future cash flows) | **4,629** | 6,836 |
| Carrying amount of the Clinical Research CGU | **(977)** | (797) |
| Excess of value-in-use over carrying value | **3,652** | 6,039 |

## 13. Intangible assets – goodwill and other (continued)

*Sensitivity Analysis*

A sensitivity analysis to determine if reasonable changes in key assumptions could lead to an impairment was conducted at 31 December 2016 using the following revised assumptions:

| | **31 December 2016** | 31 December 2015 |
|---|---|---|
| Expected revenue growth rate | **4%** | 6% |
| Expected growth rate for operating costs | **3.5%** | 5% |
| Expected capital expenditure growth rate | **1%** | 1% |
| Discount rate | **13%** | 13% |

**All other inputs remained constant.*

The revised excess of the value-in-use of the CGU at 31 December 2016, using the alternative assumptions above, has been calculated as follows:

| | **31 December 2016 $'m** | 31 December 2015 $'m |
|---|---|---|
| Revised value-in use (present value of future cash flows) | **3,321** | 3,095 |
| Carrying amount of the Clinical Research CGU | **(977)** | (797) |
| Revised excess of value-in-use over carrying value | **2,344** | 2,298 |

As the excess of the recoverable amount over the carrying value of the cash generating unit was maintained despite changes in key assumptions, management have concluded that no reasonable change in key assumptions would result in an impairment of the CGU.

## 14. Business Combinations

The acquisitions below have been accounted for as business combinations in accordance with the revised IFRS 3 *Business Combinations*:

*(a) Acquisition of ClincalRM*

On 15 September 2016, a subsidiary of the Company, ICON US Holdings Inc. acquired Clinical Research Management, Inc. ("ClinicalRM") which resulted in initial net cash outflows of $52.4 million (including certain payments made on behalf of ClinicalRM totalling $9.2 million). ClinicalRM is a full-service CRO specialising in preclinical through Phase IV support of clinical research and clinical trial services for biologics, drugs and devices. The organisation helps customers progress their products to market faster with a wide array of research, regulatory and sponsor services within the U.S. and around the globe. ClinicalRM provide full service and functional research solutions to a broad range of US government agencies. Their extensive expertise extends across basic and applied research, infectious diseases, vaccines development, testing and the response to bio-threats. They have worked in collaboration with government and commercial customers to respond to the threat of global viral epidemics. Further consideration of up to $12.0 million is payable if certain performance milestones are achieved in respect of periods up to 31 December 2017. The fair value of the deferred consideration on acquisition has been estimated as $6 million.

## 14. Business Combinations (continued)

The acquisition of ClinicalRM has been accounted for as a business combination in accordance with IFRS 3 *Business Combinations*. The following table summarises the provisional estimates of the fair values of the assets acquired and the liabilities assumed:

| | **15 September 2016 $'000** |
|---|---|
| Cash | 3,168 |
| Property, plant and equipment | 939 |
| Goodwill* | 34,576 |
| Intangible assets** | 8,644 |
| Accounts receivable | 11,725 |
| Unbilled revenue | 2,814 |
| Prepayments and other current assets | 1,673 |
| Accounts payable | (621) |
| Other liabilities | (4,515) |
| Non-current other liabilities | (7) |
| Net assets acquired | 58,396 |
| Cash consideration | 52,396 |
| Contingent consideration | 6,000 |
| Total consideration | 58,396 |

* *Goodwill represents the acquisition of an established workforce with experience in preclinical through Phase IV support of clinical research and clinical trial services for biologics, drugs and devices. Goodwill related to the US portion of the business acquired is tax deductible.*

** *The Company has made an initial estimate of separate intangible assets (comprised of customer relationships and order book) acquired of $8.6 million. This assessment is under review and will be finalised within 12 months of the date of acquisition.*

The carrying values of accounts receivable, prepayments and other current assets above are carried at amortised cost and assumed to be approximate to their fair values due to the short term nature of these balances. There is no evidence that the Group will not be able to collect all amounts due.

The pro forma effect of the ClinicalRM acquisition if completed on 1 January 2016 would have resulted in net revenue and profit for the financial years ended 31 December 2016 and 31 December 2015 as follows:

| | **Year Ended 31 December 2016 $'000** | Year Ended 31 December 2015 $'000 |
|---|---|---|
| Net revenue | **1,713,245** | 1,639,085 |
| Profit for the year | **271,929** | 244,652 |

The impact of the acquisition of ClinicalRM on 15 September 2016 was to increase revenue by $16.2 million and profit before tax by $0.4 million.

## 14. Business Combinations (continued)

*(b) Acquisition of PMG*

On 4 December 2015, a subsidiary of the Company, ICON Clinical Research LLC., acquired 100% of PMG for cash consideration of $53.7 million. The Company also made certain payments on behalf of PMG totalling $10.1 million. PMG is an integrated network of 48 clinical research sites in North Carolina, South Carolina, Tennessee and Illinois. The site network includes wholly owned facilities and dedicated clinical research sites. PMG conducts clinical trials in all major therapeutic areas and has particular expertise in vaccine, gastroenterology, cardiovascular, neurology and endocrinology studies. It has a proprietary database of clinical trial participants. It also has access to in excess of 2 million active patients via electronic medical records through its partnerships with healthcare institutions and community physical practices. The acquisition agreement provides for working capital targets to be achieved by PMG.

The acquisition of PMG has been accounted for as a business combination in accordance with IFRS 3 *Business Combinations*. The following table summarises the fair values of the assets acquired and the liabilities assumed:

| | **4 December 2015 $'000** |
|---|---|
| Cash | 194 |
| Property, plant and equipment | 712 |
| Goodwill* | 48,728 |
| Customer lists | 6,938 |
| Order backlog | 2,948 |
| Accounts receivable | 11,597 |
| Prepayments and other current assets | 1,329 |
| Accounts payable | (530) |
| Other liabilities | (3,456) |
| Non-current deferred tax liability | (3,106) |
| Net assets acquired | 65,354 |
| Cash consideration | 53,681 |
| Other liabilities assumed | 10,060 |
| Working capital adjustment | 1,613 |
| Total cash outflows | 65,354 |

* *Goodwill represents the acquisition of an established workforce with experience in clinical trial consulting and regulatory support for the development of drugs, medical devices and diagnostics, with a specific focus on strategy to increase efficiency and productivity in product development. In finalising the goodwill on acquisition of PMG in the twelve month period from acquisition, fair value adjustments were made to deferred tax liabilities ($3.1 million), accounts receivable acquired ($1.4 million), other liabilities ($1.2 million) and the value of the customer list and order backlog assets acquired ($0.4 million). Additional consideration of $1.6 million was provided on completion of the contractual working capital process.*

The carrying values of accounts receivable, prepayments and other current assets above are carried at amortised cost and assumed to be approximate to their fair values due to the short term nature of these balances. There is no evidence that the Group will not be able to collect all amounts due.

## 14. Business Combinations (continued)

The pro forma effect of the PMG acquisition if completed on 1 January 2015 would have resulted in net revenue and profit for the financial years ended 31 December 2015 and 31 December 2014 as follows:

| | **Year Ended 31 December 2015 $'000** | Year Ended 31 December 2014 $'000 |
|---|---|---|
| Net revenue | **1,601,891** | 1,527,685 |
| Profit for the year | **243,489** | 174,948 |

The impact of the acquisition of PMG on 4 December 2015 was to increase revenue by $33.8 million and profit before tax by $3.5 million in the period since acquisition.

*(c) Acquisition of MediMedia Pharma Solutions*

On 27 February 2015, a subsidiary of the Company, ICON Holdings Unlimited Company (formerly ICON Holdings), acquired 100% of MediMedia Pharma Solutions for cash consideration of $104.8 million (net of working capital adjustments of $3.9 million). In addition to the cash consideration, certain payments were made on behalf of MediMedia Pharma Solutions on completion totalling $11.3 million. Headquartered in Yardley, Pennsylvania, MediMedia Pharma Solutions includes MediMedia Managed Markets and Complete Healthcare Communications. MediMedia Managed Markets is a leading provider of strategic payer-validated market access solutions. Complete Healthcare Communications is one of the leading medical and scientific communication agencies working with medical affairs, commercial and brand development teams within life science companies. The acquisition agreement also provides for certain working capital targets to be achieved by MediMedia Pharma Solutions.

The acquisition of MediMedia Pharma Solutions has been accounted for as a business combination in accordance with IFRS 3 *Business Combinations*. The following table summarises the fair values of the assets acquired and the liabilities assumed:

| | **27 February 2015 $'000** |
|---|---|
| Property, plant and equipment | 1,049 |
| Goodwill* | 92,084 |
| Customer lists | 22,752 |
| Order backlog | 2,521 |
| Accounts receivable | 5,240 |
| Unbilled Revenue | 4,324 |
| Prepayments and other current assets | 621 |
| Accounts payable | (749) |
| Payments on account | (4,186) |
| Deferred tax liability | (2,171) |
| Other liabilities | (5,483) |
| Net assets acquired | 116,002 |

## 14. Business Combinations (continued)

| | **$'000** |
|---|---|
| Cash consideration | 108,717 |
| Other liabilities assumed** | 11,283 |
| Gross cash outflows | 120,000 |
| Working capital adjustment | (3,998) |
| Net cash outflows | 116,002 |

** Goodwill represents the acquisition of an established workforce with experience in the provision of strategic payer-validated market access solutions while the acquisition of Complete Healthcare Communications comprises an established workforce with significant communication experience working with medical affairs, commercial and brand development teams within the life science industry.*

*** Payments made at acquisition date of $11.3 million were in respect of certain one-time liabilities at the acquisition date which have subsequently been discharged.*

The carrying values of accounts receivable, unbilled revenue, prepayments and other current assets above are carried at amortised cost and assumed to be approximate to their fair values due to the short term nature of these balances. There is no evidence that the Group will not be able to collect all amounts due.

The pro forma effect of the MediMedia Pharma Solutions acquisition if completed on 1 January 2015 would have resulted in net revenue and profit for the financial years ended 31 December 2015 and 31 December 2014 as follows:

| | **Year Ended 31 December 2015 $'000** | Year Ended 31 December 2014 $'000 |
|---|---|---|
| Net revenue | **1,581,816** | 1,556,936 |
| Profit for the year | **239,846** | 181,847 |

Revenues of $84.4 million were recorded in respect of MediMedia in the period since acquisition. As MediMedia is integrated into the Group's activities, it is impracticable to disclose the impact on Group profit before tax for the year.

## 15. Inventories

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Laboratory inventories | **2,419** | 1,820 |

The cost of inventories is recognised as an expense and included in direct costs in the income statement. $30.3 million (2015: $25.4 million) was charged to the income statement for the year ended 31 December 2016.

## 16. Accounts receivable

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Accounts receivable | **425,679** | 419,548 |
| Less amounts provided for doubtful debts | **(9,450)** | (10,383) |
| Accounts receivable, net | **416,229** | 409,165 |

A provision for impairment is recognised where there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of the receivable. At 31 December 2016, the Group maintained an impairment provision of $9.5 million (2015: $10.4 million). Movement on the accounts receivable impairment provision during the year was as follows:

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Accounts receivable impairment provision** | | |
| Balance at start of year | **10,383** | 5,458 |
| Amounts used during the year | **(3,782)** | (161) |
| Amounts provided for during the year | **4,651** | 7,572 |
| Amounts released during the year | **(1,814)** | (2,244) |
| Foreign currency translation | **12** | (242) |
| Balance at end of year | **9,450** | 10,383 |

*All receivables are due within twelve months of the year ended 31 December 2016.*

Further analysis of Group's accounts receivable balances at 31 December 2016 is as follows:

| | **Gross accounts receivable 2016 $'000** | **Provision for impairment 2016 $'000** | **Net receivable 2016 $'000** | Gross accounts receivable 2015 $'000 | Provision for impairment 2015 $'000 | Net accounts receivable 2015 $'000 |
|---|---|---|---|---|---|---|
| Not past due | **339,920** | **-** | **339,920** | 304,502 | (17) | 304,485 |
| Past due 0 to 30 days | **35,485** | **-** | **35,485** | 62,362 | (56) | 62,306 |
| Past due 31 to 60 days | **22,266** | **-** | **22,266** | 16,818 | (326) | 16,492 |
| Past due 61+ days | **28,008** | **(9,450)** | **18,558** | 35,866 | (9,984) | 25,882 |
| Accounts receivable | **425,679** | **(9,450)** | **416,229** | 419,548 | (10,383) | 409,165 |

## 16. Accounts receivable (continued)

The carrying amounts of the Group's accounts receivables are denominated in the following currencies:

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Currency** | | |
| US Dollar | **349,686** | 373,412 |
| Euro | **40,792** | 13,119 |
| Sterling | **7,623** | 11,201 |
| Other currencies | **18,128** | 11,433 |
| Total | **416,229** | 409,165 |

## 17. Other assets

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Non-current other assets** | | |
| Lease deposits | **7,623** | 7,411 |
| Deferred employee savings scheme assets | **12,431** | 9,638 |
| Total | **20,054** | 17,049 |

Lease deposits paid in respect of certain premises leased by the Group are refundable on expiry of the related leases. Discounting of the non-current element has not been applied because the discount would be immaterial. However, discounting may apply in the future if the non-current element becomes significant such that the discounting impact would be material.

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Other current assets** | | |
| Personnel related prepayments | **893** | 365 |
| Facility and information system related prepayments | **18,876** | 18,546 |
| General overhead prepayments | **10,441** | 13,023 |
| Sales tax recoverable | **21,531** | 21,109 |
| Other receivables | **6,821** | 6,737 |
| Total | **58,562** | 59,780 |

Other current assets do not contain any impaired assets. The maximum exposure to credit risk at the reporting date is the carrying value of each receivable. The Group does not hold any collateral as security.

## 18. Current asset investments

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| At start of year | **85,990** | 97,100 |
| Additions | **22,030** | 14,194 |
| Disposals/maturities | **(40,858)** | (25,708) |
| Interest on short term investments | **823** | 571 |
| Realised gain/(loss) on sale of short term investments | **50** | (113) |
| Unrealised capital (loss)/gain - investments | **11** | (54) |
| At end of year | **68,046** | 85,990 |

Current asset investments are reported at fair value, with unrealised gains or losses recorded in other comprehensive income. During the year ended 31 December 2016 an unrealised gain of $0.01 million (2015: unrealised loss of $0.05 million) was recorded. Current asset investments comprise highly liquid investments with maturities of greater than three months and minimum "A-" rated fixed and floating rate securities.

## 19. Cash and cash equivalents

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Cash at bank and in hand | **73,651** | 72,940 |
| Short term deposits | **118,890** | 30,971 |
| Cash and cash equivalents | **192,541** | 103,911 |

## 20. Accrued and other liabilities

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Non-current other liabilities** | | |
| Personnel related liabilities (note 10) | **429** | - |
| Deferred government grants (note 22) | **887** | 959 |
| Retirement benefit plan net obligation (note 10) | **8,952** | 7,189 |
| Deferred employee savings scheme liabilities | **8,371** | 5,035 |
| Total | **18,639** | 13,183 |

Deferred employee savings scheme liabilities are payable more than 5 years from the reporting date *(see note 26).* Discounting of the non-current element has not been applied because the impact would be immaterial. However, discounting may apply in the future if the non-current element becomes significant such that the discounting impact would be material.

## 20. Accrued and other liabilities (continued)

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Current accrued and other liabilities** | | |
| Personnel related liabilities | **135,349** | 159,339 |
| Facility and information system related liabilities | **14,182** | 22,517 |
| General overhead liabilities | **31,126** | 29,257 |
| Other liabilities | **7,584** | 18,608 |
| Short term government grants (note 22) | **54** | 43 |
| Total | **188,295** | 229,764 |

## 21. Provisions

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Non-current other liabilities** | | |
| Restructuring provision (note 8) | **1,083** | 1,518 |
| Contingent consideration (note 14) | **6,000** | - |
| Total | **7,083** | 1,518 |

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Current liabilities** | | |
| Restructuring provision (note 8) | **1,349** | 598 |
| Total | **1,349** | 598 |

## 22. Deferred government grants

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| At beginning of year | **1,002** | 1,226 |
| Repayment | **-** | (159) |
| Amortised during the year | **44** | 53 |
| Foreign exchange movement | **(105)** | (118) |
| At end of year | **941** | 1,002 |
| Current | **54** | 43 |
| Non-current | **887** | 959 |
| Total | **941** | 1,002 |

### 22. Deferred government grants (continued)

Under grant agreements amounts received may become repayable in full or in part should certain circumstances specified within the grant agreements occur, including downsizing by the Group, disposing of the related assets, ceasing to carry on its business or the appointment of a receiver over any of its assets. During the year ended 31 December 2015, the Company repaid $159,000 in respect of certain government grants received.

### 23. Bank credit lines and loan facilities

Reconciliation of opening to closing net debt:

| | 31 Dec 2015 | Drawn down | Repaid | Net cash inflow | Other non-cash adjustments | Balance 31 Dec 2016 |
|---|---|---|---|---|---|---|
| Net cash and cash equivalents | 103,911 | - | - | 90,680 | (2,050) | 192,541 |
| Bank borrowings | - | 73,000 | (73,000) | - | - | - |
| Private placement notes | (348,304) | - | - | - | (207) | (348,511) |
| | **(244,393)** | **73,000** | **(73,000)** | **90,680** | **(2,257)** | **(155,970)** |

On 27 July 2015 the Company entered into a 364 day bridge facility for $350.0 million with two financial institutions. The facility bore interest at LIBOR plus a margin and included certain guarantees and indemnities in favour of the two financial institutions. The bridge facility was repaid in full in December 2015.

On 15 December 2015 the Company issued through its subsidiary ICON Investment Five Unlimited Company (the “Issuer”) of $350 million aggregate principal amount of its 3.64% Senior Notes. The Senior Notes will mature on 15 December 2020. Interest is payable semi-annually on the Senior Notes on each 15 June and 15 December commencing 15 June 2016. The Senior Notes are guaranteed by ICON plc. The Senior Notes may be redeemed, at the Issuer’s option, at any time prior to maturity, at par plus a make whole premium, together with accrued and unpaid interest, if any, to the redemption date. The terms of the notes are set forth in the Note Purchase and Guarantee Agreement, dated as of 15 December 2015, by and among the Issuer, ICON plc and the purchasers named therein (“Note Purchase and Guarantee Agreement”). The Issuer used the proceeds from the sale of the Senior Notes to repay the existing $350 million bridge facility. The Senior Notes are presented net of related financing costs on the Consolidated Statement of Financial Position ($348.5 million at 31 December 2016).

On 30 June 2014 the Group entered into a five year committed multi-currency Revolving Credit Facility for $100.0 million with Citibank, JP Morgan, Santander and Barclays Bank (“Revolving Credit Facility”). Each bank subject to the agreement has committed $25 million to the facility, with equal terms and conditions in place with each institution. The facility is guaranteed by ICON plc. The facility bears interest at LIBOR plus a margin. $53.0 million was drawn down and fully repaid during the year. The undrawn facility at 31 December 2016 was therefore $100.0 million.

$20.0 million was drawn down and subsequently repaid by the Group under the terms of a one year uncommitted short term revolving credit facility of $30.0 million. The facility bears interest at LIBOR plus a margin. No amounts were drawn under this facility at 31 December 2016.

The Note Purchase and Guarantee Agreement includes certain financial covenants that require compliance with a consolidated leverage ratio, a minimum EBIT to consolidated net interest charge ratio and a maximum amount of priority debt. The financial covenants are defined in the Note Purchase and Guarantee Agreement.

## 23. Bank credit lines and loan facilities (continued)

The Senior Notes and the Revolving Credit Facility credit agreements also include certain customary covenants that restrict the Group's ability to enter into certain transactions or events including;

- incur or assume liens or additional debt,
- dispose of assets,
- engage in mergers or reorganisations or
- enter into certain types of transactions with affiliates.

## 24. Share capital

***Group and Company***

| **Authorised share capital:** | **No. of Ordinary Shares** |
|---|---|
| Ordinary shares of par value €0.06 | 100,000,000 |

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Allotted, called up and fully paid** | | |
| 54,530,843 (31 December 2015: 54,958,912) ordinary shares of €0.06 each | **4,611** | 4,679 |
| **Issued, fully paid share capital** | | |
| At beginning of year | **4,719** | 5,059 |
| Employee share options exercised | **26** | 52 |
| Restricted share units | **41** | 18 |
| Repurchase of ordinary shares | **(94)** | (410) |
| At end of year | **4,692** | 4,719 |

Holders of ordinary shares will be entitled to receive such dividends as may be recommended by the Board of Directors of the Company and approved by the Shareholders and/or such interim dividends as the Board of Directors of the Company may decide. On liquidation or a winding up of the Company, the par value of the ordinary shares will be repaid out of the assets available for distribution among the holders of the ordinary shares of the Company. Holders of ordinary shares have no conversion or redemption rights. On a show of hands, every holder of an ordinary share present in person or proxy at a general meeting of shareholders shall have one vote, for each ordinary share held with no individual having more than one vote.

During the year ended 31 December 2016, 393,240 options were exercised by employees at an average exercise price of $25.79 per share for total proceeds of $10.1 million. During the year ended 31 December 2016, 296,386 ordinary shares were issued in respect of certain RSUs and 311,492 ordinary shares were issued in respect of PSUs previously awarded by the Company.

During the year ended 31 December 2015, 773,753 options were exercised by employees at an average exercise price of $27.13 per share for total proceeds of $21.0 million. During the year ended 31 December 2015, 268,870 ordinary shares were issued in respect of certain RSUs and 7,990 ordinary shares were issued in respect of PSUs previously awarded by the Company.

## 24. Share capital (continued)

*Share repurchase programme*

On 3 October 2016 the Company commenced a previously announced share buyback programme of up to $400 million. The Company can acquire up to 10% of its outstanding ordinary shares (by way of redemption), in accordance with Irish law, the United States securities laws and the Company's constitutional documents through open market share acquisitions. At 31 December 2016 a total of 1,429,187 ordinary shares were redeemed by the Company under this buyback programme for a total consideration of $110.0 million. All ordinary shares that were redeemed under the buyback programme were cancelled in accordance with the Constitution of the Company and the nominal value of these shares transferred to other undenominated capital as required under Irish Company Law.

On 1 May 2015 the Company commenced a buyback programme of up to $60 million under which the Company could acquire its outstanding ordinary shares (by way of redemption), in accordance with Irish law, the United States securities laws and the Company's constitutional documents through open market share acquisitions. A total of 882,419 ordinary shares were redeemed by the Company under this buyback programme for a total consideration of $57.9 million. All ordinary shares that were redeemed under the buyback programme were cancelled in accordance with the Constitution of the Company and the nominal value of these shares transferred to other undenominated capital as required under Irish Company Law.

On 31 July 2015 the Company commenced a further buyback programme of up to $400 million under which the Company could acquire its outstanding ordinary shares (by way of redemption), in accordance with Irish law, the United States securities laws and the Company's constitutional documents through open market share acquisitions. A total of 5,316,062 ordinary shares were redeemed by the Company under this buyback programme for a total consideration of $400 million. All ordinary shares that were redeemed under the buyback programme were cancelled in accordance with the Constitution of the Company and the nominal value of these shares transferred to other undenominated capital as required under Irish Company Law. The share buyback programme was completed in December 2015, with a total of 6,198,481 ordinary shares redeemed during the year ended 31 December 2015 for total consideration of $457.9 million.

Under the repurchase programme, a broker purchased the Company's shares from time to time on the open market or in privately negotiated transactions in accordance with agreed terms and limitations. The programme was designed to allow share repurchases during periods when the Company would ordinarily not be permitted to do so because it may be in possession of material non-public or price-sensitive information, applicable insider trading laws or self-imposed trading blackout periods. The Company's instructions to the broker were irrevocable and the trading decisions in respect of the repurchase programme were made independently of and uninfluenced by the Company. The Company confirms that on entering the share repurchase plans it had no material non-public, price-sensitive or inside information regarding the Company or its securities. Furthermore, the Company will not enter into additional plans whilst in possession of such information. The timing and actual number of shares acquired by way of the redemption will be dependent on market conditions, legal and regulatory requirements and the other terms and limitations contained in the programme. In addition, acquisitions under the programme may be suspended or discontinued in certain circumstances in accordance with the agreed terms. Therefore, there can be no assurance as to the timing or number of shares that may be acquired under the programme.

## 25. Capital and reserves

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Share based payment reserve | **141,890** | 108,397 |
| Other undenominated capital | **809** | 715 |
| Other reserves | **10,348** | 11,340 |
| Foreign currency translation reserve | **(83,809)** | (62,542) |
| Current asset investment – fair value reserve | **(23)** | (34) |
| Retained earnings | **650,583** | 491,671 |
| Total | **719,798** | 549,547 |

*Share based payment reserve*

The share based payment reserve is used to account for share-based payments. The fair value of share based payments is expensed to the income statement over the period the related services are received, with a corresponding increase in equity. At 31 December 2016 the Group has recognised a cumulative charge for share based payments of $181.9 million net of deferred tax (2015: $148.9 million). The Group has also recognised a cumulative charge of $21.7 million (2015: $17.4 million) in reserves for the current and deferred tax effects of the tax benefits relating to the exercise of employee share options in excess of related cumulative compensation expense. The Group has reclassified a cumulative credit of $61.8 million (2015: $57.9 million) to retained earnings in respect of exercised and expired share based awards.

*Other undenominated capital*

Other undenominated capital comprises the nominal value of shares repurchased and cancelled by the Group and transferred from share capital to other undenominated capital as required under Irish Company Law. During the year ended 31 December 2016, 1,429,187 (31 December 2015: 6,198,481) ordinary shares were repurchased and cancelled by the Group.

*Other reserves*

The Group has recognised a non-distributable reserve of $0.6 million in accordance with agreements made between the Group and Enterprise Ireland, an Irish government agency. The requirement for these non-distributable reserves will expire between the period 2014 and 2017. In 2005 the Group also recognised a capital contribution of $6.1 million being the fair value of outstanding ordinary shares transferred to Mr Peter Gray, formerly Vice Chairman of the Board of Directors and formerly Chief Executive Officer, by founding Directors, Dr. John Climax and Dr. Ronan Lambe.

On 5 October 2015, the Company entered into an interest rate hedge in respect of the planned issuance of the Senior Notes in December 2015. The interest rate hedge matured on 17 November 2015 when the interest rate on the Senior Notes was fixed. The cash proceeds ($4.6 million), representing the realised gain on the interest rate hedge was received on maturity in November 2015 and is recorded in Other Reserves. The realised gain will be amortised to the income statement, net against interest payable, over the period of the Senior Notes. During 2016, $0.9 million was amortised to the Income Statement.

*Currency reserve*

The currency reserve comprises all foreign exchange differences arising from the translation of the financial statements of foreign currency denominated operations of the Group since 1 June 2004, the date of transition to IFRS. As at 31 December 2016, this amounted to a cumulative loss of $69.8 million (2015: loss of $56.9 million). In addition the Group has recognised a cumulative loss for the currency impact of long term funding amounting to $11.7 million at 31 December 2016 (2015: loss of $2.9 million) and a cumulative charge of $2.3 million (2015: charge $2.7 million) for the related tax on the currency impact on long term funding.

## 25. Capital and reserves (continued)

*Current asset investments – fair value reserve*

The current asset investment – fair value reserve comprises unrealised fair value gains and losses on current asset investments held as available-for-sale. The Group has recognised a gain during the year ended 31 December 2016 of $0.01 million (2015: loss of $0.05 million). Unrealised gains and losses are reclassified to the Consolidated Income Statement on disposal or impairment of the related asset.

*Retained earnings*

In addition to the profit for the financial year the Group has also recognised the re-measurement of the defined benefit pension scheme in this reserve. In 2016, the Group recognised a re-measurement on the defined benefit pension scheme of $(2.7) million (31 December 2015: a re-measurement of $2.2 million). In 2016, the Group recognised share issue costs of $0.02 million in this reserve. The Group has recognised a credit of $3.9 million (2015: credit of $8.0 million) in respect of exercised and expired share based awards that have been transferred from the Option Reserve. During the year, the Group also participated in a share buyback programme. During the year ended 31 December 2016, the Group redeemed a total of 1,429,187 ordinary shares for total consideration of $110.0 million (2015: 6,198,481 ordinary shares were repurchased by the Group for a total consideration of $457.9 million), see note 24 Share Capital for further detail.

## 26. Financial instruments

The Board of Directors have overall responsibility for the establishment and oversight of the Group's risk management framework. The Group is exposed to various financial risks in the normal course of its business. The principle financial risks to which it is exposed include credit risks related to the creditworthiness of its customers and counterparties, with which it invests surplus cash funds, liquidity risk associated with the availability of sufficient capital resources, foreign currency risks, including both translation and transaction risk, and interest rate risk.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations. The Audit Committee of the Board oversees how management monitors compliance with the Group's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Group.

*Credit risk*

The Group's exposure to credit risk arises predominately in respect of the creditworthiness of its customers in relation to amounts due from them for the value of work performed and the creditworthiness of counterparties with which it invests surplus cash balances. Credit risk pertaining to customers is managed by ensuring strict credit procedures are in place, in particular through evaluation of all new customers and ongoing account monitoring. The Group earns revenues from contracts with its customers based upon certain activities and performance specifications. Contract terms may range from several weeks to several years depending on the nature of the work to be performed. Such contracts are generally either fixed price or units-based. In most cases, a small portion of the contract fee is paid at the time the study or trial is started. The balance of the contract fee is generally payable in instalments over the study or trial duration and may be based on the achievement of certain performance targets or "milestones" or, based on units delivered, or on a fixed monthly payment schedule. For instance, instalment payments may be based on patient enrolment or delivery of the database. Where customers request changes in the scope of a trial or in the services to be provided, a change order or amendment is issued which may result either in an increase or decrease in the contract value. The Group also contracts on a "fee-for-service" or "time and materials" basis. During the course of the study, the Company will generally incur reimbursable expenses. Reimbursable expenses are typically estimated and budgeted within the contract and are generally invoiced on a monthly basis based on actual expenses incurred. Reimbursable expenses include payments to investigators, travel and accommodation costs and various other expenses incurred over the course of the clinical trial which are fully reimbursable by the client.

## 26. Financial instruments (continued)

Most of the Group's contracts are terminable immediately by the customer with justifiable cause or with 30 to 90 days notice without cause. In the event of termination, the Group is usually entitled to all sums owed for work performed through the notice of termination and certain costs associated with termination of the study. Termination or delay in the performance of a contract occurs for various reasons, including, but not limited to, unexpected or undesired results, production problems resulting in shortages of the drug, adverse patient reactions to the drug, the client's decision to de-emphasise a particular trial, inadequate patient enrollment or investigator recruitment.

The Group's top five customers accounted for approximately 45% and 49% of net revenue during the years ended 31 December 2016 and 31 December 2015. During the year ended 31 December 2016 26% of the Group's net revenues were derived from its top customer (2015: 31%). With the exception of this customer, no customer contributed more than 10% of net revenues during the current or prior year.

The maximum exposure of credit risk pertaining to customers is the carrying value of accounts receivable and unbilled revenue balances. The carrying value of accounts receivable and unbilled revenue balances, by geographic region, at 31 December 2016 was as follows:

| | **Accounts Receivable** | | **Unbilled Revenue** | |
|---|---|---|---|---|
| | **31 December 2016 $'000** | 31 December 2015 $'000 | **31 December 2016 $'000** | 31 December 2015 $'000 |
| Europe | **310,601** | 282,621 | **119,127** | 100,771 |
| United States | **98,501** | 119,934 | **69,268** | 65,700 |
| Rest of World | **7,127** | 6,610 | **4,292** | 7,178 |
| Total | **416,229** | 409,165 | **192,687** | 173,649 |

Credit risk exposure also arises due to the investment of Group surplus cash in various financial instruments. The Group's treasury function actively manages cash resources and invests surplus cash balances with various financial institutions in accordance with strict credit risk management policies and controls as specified by the Group's Board of Directors. Credit risk in relation to these balances is managed through on-going monitoring of the credit quality ensuring that funds are invested as per agreed investment guidelines. These balances are classified as cash and cash equivalents or current asset investments depending on the maturity of the related investment. Invested cash comprises of cash and cash equivalents with a maturity of three months or less and credit quality is set at a minimum credit rating of BB+ for overnight maturities and a minimum of A- for any bank deposits greater than overnight and up to three months. Current asset investments comprise investments with maturities of greater than three months. The minimum ratings required for each class of investment are as follows: bank deposits (A-), money market funds (AAA), liquidity funds (AAA) and fixed rate corporate bonds or floating rate notes (A- non-financial, AA- financial).

## 26. Financial instruments (continued)

*Liquid and capital resources*

The Group's liquid and capital resources at 31 December 2016 were as follows:

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Current asset investments (note 18) | **68,046** | 85,990 |
| Cash and cash equivalents (note 19) | **192,541** | 103,911 |
| Total liquid resources | **260,587** | 189,901 |
| Shareholders' equity | **977,467** | 797,130 |

The principal operating cash requirements of the Group include payment of salaries, office rents, travel expenditures and payments to investigators. Other cash requirements include capital expenditures for facilities and information system enhancements and cash required to fund acquisitions and other growth opportunities. The CRO industry is generally not capital intensive. The Group primarily finances its operations and growth through cash flows from operations, together with amounts drawn under negotiated facilities as required.

The Group's primary objectives in managing its liquid and capital resources are as follows:

- to maintain adequate resources to fund its continued operations,
- to ensure availability of sufficient resources to sustain future development and growth of the business,
- to maintain sufficient resources to mitigate risks and unforeseen events which may arise.

The Group manages risks associated with liquid and capital resources through ongoing monitoring of actual and forecast cash balances and by reviewing the existing and future cash requirements of the business. It ensures that sufficient headroom is available under the Group's existing negotiated facilities and negotiates additional facilities as required. Details of the Group's negotiated facilities are set out in note 23 Bank Credit Lines and Loan Facilities. There were no funds drawn under the Revolving Credit Facility at 31 December 2016. The Group may raise additional finance through the issuance of ordinary shares or debt as required.

The Revolving Credit Facility bears interest at LIBOR plus a margin. There were no amounts drawn on the Revolving Credit Facility at 31 December 2016. The Company is therefore subject to interest rate volatility in respect of any future draw down on the Revolving Credit Facility or in respect of any future issuances of debt. The interest rate in respect of the $350 million Senior Notes is fixed at 3.64% for the five year term of the agreement.

The following table sets out details of the maturity of the Group's financial liabilities into the relevant maturity groupings based on the remaining period from the financial year end date to contractual maturity date:

## 26. Financial instruments (continued)

*Year ended 31 December 2016*

| | Carrying amount $'000 | Contractual cash flows $'000 | 6 months or less $'000 | 6-12 months $'000 | 1-2 years $'000 | 2-5 years $'000 | More than 5 years $'000 |
|---|---|---|---|---|---|---|---|
| Senior Notes | (348,511) | (350,000) | - | - | - | (350,000) | - |
| Interest on Senior Notes | (566) | (50,960) | (6,370) | (6,370) | (12,740) | (25,480) | - |
| Non-current other liabilities* | (14,800) | (14,800) | - | - | (6,000) | - | (8,800) |
| Accounts payable | (8,696) | (8,696) | (8,696) | - | - | - | - |
| Accrued and other liabilities* | (188,241) | (188,241) | (188,241) | - | - | - | - |
| | **(560,814)** | **(612,697)** | **(203,307)** | **(6,370)** | **(18,740)** | **(375,480)** | **(8,800)** |

*Year ended 31 December 2015*

| | Carrying amount $'000 | Contractual cash flows $'000 | 6 months or less $'000 | 6-12 months $'000 | 1-2 years $'000 | 2-5 years $'000 | More than 5 years $'000 |
|---|---|---|---|---|---|---|---|
| Senior Notes | (348,304) | (350,000) | - | - | - | (350,000) | - |
| Interest on Senior Notes | (566) | (63,700) | (6,370) | (6,370) | (12,740) | (38,220) | - |
| Non-current other liabilities* | (5,035) | (5,035) | - | - | - | - | (5,035) |
| Accounts payable | (7,023) | (7,023) | (7,023) | - | - | - | - |
| Accrued and other liabilities* | (229,720) | (229,720) | (229,720) | - | - | - | - |
| | **(590,648)** | **(655,478)** | **(243,113)** | **(6,370)** | **(12,740)** | **(388,220)** | **(5,035)** |

**Non-current other liabilities above excludes retirement plan net benefit obligation (2016: $8.9 million and 2015: $7.2 million) and deferred government grants (2016: $0.9 million and 2015: $1.0 million). Accrued and other liabilities exclude deferred government grants (2016: $54,000 and 2015: $43,000).*

*Foreign currency risk*

The Group is subject to a number of foreign currency risks given the global nature of its operations. The principal foreign currency risks to which the business is subject includes both foreign currency translation risk and foreign currency transaction risk. Although domiciled in Ireland, the Group presents its results in U.S. dollars. As a consequence the results of non-U.S. based operations, when translated into U.S. dollars, could be affected by fluctuations in exchange rates between the U.S. dollar and the currencies of those operations.

The Group is also subject to foreign currency transaction exposures as the currency in which contracts are priced can be different from the currencies in which costs relating to those contracts are incurred. The Group's operations in the United States are not materially exposed to such currency differences as the majority of revenues and costs are in U.S. dollars. However, outside the United States the multinational nature of the Group's activities means that contracts are usually priced in a single currency, most often U.S. dollars, Euros or pounds Sterling, while costs arise in a number of currencies, depending on, among other things, which of the Group's offices provide staff for the contract and the location of investigator sites.

## 26. Financial instruments (continued)

Although many such contracts benefit from some degree of natural hedging due to the matching of contract revenues and costs in the same currency, where costs are incurred in currencies other than those in which contracts are priced, fluctuations in the relative value of those currencies could have a material effect on the results of the Group's operations. The Group regularly reviews its foreign currency exposures and usually negotiates currency fluctuation clauses in its contracts which allow for price negotiation if certain exchange rate triggers occur.

The following table sets out the Group's transaction risk in relation to financial assets and liabilities at 31 December 2016:

| | U.S. Dollar 2016 $'000 | Sterling 2016 $'000 | Euro 2016 $'000 | Other 2016 $'000 | Total 2016 $'000 |
|---|---|---|---|---|---|
| Accounts receivable | 19,381 | 6,461 | 31,168 | 10,195 | 67,205 |
| Unbilled revenue/payments on account | (1,705) | (1,862) | (3,357) | 231 | (6,693) |
| Cash and cash equivalents | 4,254 | 2,321 | 4,525 | 2,132 | 13,232 |
| Other current assets | 2,741 | 1,646 | 22,078 | (59) | 26,406 |
| Other non-current assets | 62 | - | 2,072 | 4 | 2,138 |
| Accounts payable | 205 | (246) | (1,617) | (265) | (1,923) |
| Accrued and other liabilities | (865) | (1,959) | (21,369) | (2,325) | (26,518) |
| Current tax payable | - | - | (6,710) | 1 | (6,709) |
| Intergroup transactions | (6,176) | (1,291) | 1,213 | (23,343) | (29,597) |
| **Total transaction risk** | **17,897** | **5,070** | **28,003** | **(13,429)** | **37,541** |

*Foreign exchange gains and losses recognised on the above balances are recorded in "other operating expenses". The total foreign exchange loss incurred during the year ending 31 December 2016 amounted to $2.1 million (2015: $3.6 million gain).*

The following table sets out the Group's transaction risk in relation to financial assets and liabilities at 31 December 2015:

| | U.S. Dollar 2015 $'000 | Sterling 2015 $'000 | Euro 2015 $'000 | Other 2015 $'000 | Total 2015 $'000 |
|---|---|---|---|---|---|
| Accounts receivable | 12,082 | 8,671 | 53,626 | 6,591 | 80,970 |
| Unbilled revenue/payments on account | (2,214) | (1,398) | (19,101) | 1,723 | (20,990) |
| Cash and cash equivalents | 768 | 431 | 11,827 | 177 | 13,203 |
| Other current assets | (3,629) | 711 | 21,127 | (619) | 17,590 |
| Other non-current assets | 230 | - | 210 | 5 | 445 |
| Accounts payable | (643) | (131) | (1,020) | (146) | (1,940) |
| Accrued and other liabilities | 915 | 2,022 | (42,256) | 1,703 | (37,616) |
| Current tax payable | - | - | (17,928) | 14 | (17,914) |
| Intergroup transactions | (2,580) | (3,620) | 45,041 | (8,568) | 30,273 |
| **Total transaction risk** | **4,929** | **6,686** | **51,526** | **880** | **64,021** |

*Foreign exchange gains and losses recognised on the above balances are recorded in "other operating expenses". The total foreign exchange gain incurred during the year ending 31 December 2015 amounted to $3.6 million (2014: $5.9 million gain).*

## 26. Financial instruments (continued)

The following significant exchange rates applied during the year:

| | **Average Rate** | | **Closing Rate** | |
|---|---|---|---|---|
| | **2016** | 2015 | **2016** | 2015 |
| Euro 1:$ | **1.1060** | 1.1123 | **1.0517** | 1.0862 |
| Pound Sterling 1:$ | **1.3684** | 1.5307 | **1.2340** | 1.4736 |

A simultaneous ten percent strengthening or weakening of the US Dollar, Euro and Sterling against all other currencies (which remained constant) would have increased or decreased profit and equity by $1.63 million, $2.55 million and $0.46 million respectively (31 December 2015 $0.45 million, $4.68 million and $0.61 million respectively) as a consequence of the retranslation of foreign currency denominated financial assets and liabilities at those dates. This change in profit and equity is excluding the effect of foreign currency denominated long term loans.

*Interest rate risk*

The Group is exposed to interest rate risk in respect of its cash and cash equivalents, current asset investments and amounts drawn under negotiated facilities which are subject to variable rates of interest. Funds drawn under the private placement bond are subject to fixed rates until 2020. As the Group does not account for these fixed rate liabilities at fair value through profit or loss, any change in market interest rates has no effect on the profit or loss. The Group's treasury function actively manages its available cash resources and invests significant cash balances in various financial instruments to try to ensure optimum returns for the Group's surplus cash balances. Financial instruments are classified either as cash and cash equivalents or current asset investments depending upon the maturity of the related investment. Funds may be invested in the form of floating rate notes and medium term minimum "A-" rated corporate securities. The Group may be subject to interest rate risk in respect of interest rate changes on amounts invested. The Group manages interest rate risk in respect of these balances by monitoring the composition of the Group's investment portfolio on an ongoing basis having regard to current market interest rates and future trends.

In addition to interest rate risk on surplus cash balances invested, the Group may also be subject to interest rate risk on amounts drawn under negotiated facilities which are subject to variable rates of interest. Details of the Group's negotiated facility are set out in note 23 Bank Credit Lines and Loan Facilities at 31 December 2016. The Group manages interest rate risk in respect of amounts under negotiated facilities through ongoing monitoring of actual and forecast cash balances, reviewing existing and future cash requirements of the business and by reviewing existing levels of borrowings having regard to current market interest rates and future trends. There are no amounts drawn under the Group's revolving credit facility at 31 December 2016.

In December 2015 the Group issued $350m in the private placement market, the rate on these Senior Notes is fixed at 3.64% for the five year term. The interest rate is further reduced by an interest rate cash flow hedge which was entered into in advance of the rate fixing date. This cash flow hedge was deemed to be fully effective in accordance with IAS 39 *Financial Instruments: Recognition and Measurement*. The realised gain related to this derivative is recorded within comprehensive income and is amortised over the life of the Senior Notes. The effective rate, reflecting the benefit of the gain on the cash flow hedge, on our 5 year Senior Notes is fixed at 3.37%.

## 26. Financial instruments (continued)

The sensitivity analysis below represents the revised amount following the hypothetical change in our interest income and interest expense based on an immediate 1% movement in market interest rates.

| | Interest Income | | Interest Expense | |
|---|---|---|---|---|
| | **2016** | 2015 | **2016** | 2015 |
| | **$'000** | $'000 | **$'000** | $'000 |
| As reported | **1,484** | 1,306 | **13,006** | 3,992 |
| 1% Increase | **3,990** | 3,521 | **13,168** | 4,318 |
| 1% Decrease | **31** | - | **12,845** | 3,748 |

*Fair values*

Certain financial instruments are measured in the Statement of Financial Position at fair value using a fair value hierarchy of valuation inputs. The hierarchy prioritises the inputs into three levels based on the extent to which inputs used in measuring fair value are observable in the market. Each fair value measurement is reported in one of three levels, which is determined by the lowest level input that is significant to the fair value measurement in its entirety. These levels are:

Level 1: Inputs are based upon unadjusted quoted prices for identical instruments traded in active markets.

Level 2: Inputs are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3: Inputs are generally unobservable and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability.

The fair value of financial assets together with the carrying amounts shown in the Statement of Financial Position is as follows:

| | **31 December 2016 Carrying Amount $'000** | **31 December 2016 Fair Value Level 1 $'000** | 31 December 2015 Carrying Amount $'000 | 31 December 2015 Fair Value Level 1 $'000 |
|---|---|---|---|---|
| **Financial Assets** | | | | |
| Current asset investments | **68,046** | **68,046** | 85,990 | 85,990 |
| | **68,046** | **68,046** | 85,990 | 85,990 |

## 26. Financial instruments (continued)

The carrying values of accounts receivable (less impairment provision), unbilled revenue, other current assets, cash and cash equivalents and other non-current assets are carried at amortised cost and assumed to be approximate to their fair values due to the short term nature of these balances. As such their fair values have not been disclosed.

Current asset investments are stated at fair value, with any resultant gain or loss recognised in the statement of comprehensive income. The fair value of current asset investments is their market price at the financial year end date. They are measured on the basis of Level 1 inputs.

The Group's Senior Notes (private placement debt) is carried at $350.0 million (prior to related financing costs). The carrying value at 31 December 2016, closely approximates fair value.

The carrying values of accounts payable, accrued and other liabilities and provisions (excluding contingent consideration) and other non-current liabilities are carried at amortised cost and assumed to be approximate to their fair values.

Each category of asset and liability has remained within the same level of hierarchy as the prior year as there has been no change in the extent to which the inputs used in measuring fair value are or are not observable within the market.

The following table shows reconciliation from the opening balances to the closing balances for Level 3 fair values:

| | **Contingent Consideration 2016 $'000** | Contingent Consideration 2015 $'000 |
|---|---|---|
| Opening balance | **-** | - |
| In respect of a business combination (note 14) | **6,000** | - |
| Payments made during the year | **-** | - |
| **Closing balance** | **6,000** | - |

The following table shows the valuation techniques used in measuring Level 3 fair values, as well as significant unobservable inputs used:

| **Type** | **Valuation Technique** | **Significant Unobservable Inputs** | **Inter-relationship between significant unobservable inputs and fair value measurement** |
|---|---|---|---|
| Contingent Consideration | The valuation model considers the estimated future cash flows of the entity. | (1) Forecast future cash flows<br>(2) Forecast annual growth rate | The estimated fair value would increase (decrease) if the forecasted future cash flows were higher (lower) or if the entity missed agreed targets. |

## 27. Lease commitments

The Group has several non-cancellable operating leases, primarily for facilities, that expire over the next 10 years. These leases generally contain renewal options and require the Group to pay all executory costs such as maintenance and insurance. Future minimum rental commitments for operating leases with non-cancellable terms are as follows:

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Less than one year | **34,682** | 36,921 |
| Between one and two years | **28,219** | 26,784 |
| Between two and three years | **21,358** | 20,547 |
| Between three and four years | **15,646** | 15,502 |
| Between four and five years | **12,477** | 11,974 |
| More than five years | **40,132** | 45,924 |
| **Total** | **152,514** | 157,652 |

## 28. Commitments and contingencies

*(a) Capital commitments*

The following capital commitments for the purchase of property, plant and equipment were authorised by the Group at 31 December 2016:

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Contracted for | **8,322** | 13,757 |
| **Total** | **8,322** | 13,757 |

*(b) Guarantees*

Where the Group enters into financial guarantee contracts to guarantee the indebtedness of other companies within the Group, the Group considers these to be insurance arrangements and accounts for them as such. The Group treats the guarantee contract as a contingent liability until such time as it becomes probable that the Group will be required to make a payment under that guarantee. As set out in note 23, the Senior Notes are guaranteed by ICON plc.

## 28. Commitments and contingencies (continued)

The Company has guaranteed all of the liabilities referred to in Section 357(1) (b) of the Companies Act 2014 in respect of the whole of the financial year ending 31 December 2016 for the subsidiary companies listed below. These subsidiaries are availing of the exemption under Section 357 of the Companies Act 2014 not to file statutory financial statements.

- ICON Clinical Research Limited
- DOCS Resourcing Limited
- ICON Holdings Unlimited Company
- Timpani Unlimited Company
- ICON Clinical Research Property Holdings (Ireland) Limited
- ICON Clinical Research Property Development (Ireland) Limited
- ICON Holdings Clinical Research International Limited
- ICON Clinical International Unlimited Company
- ICON Investments One Limited
- ICON Investments Two Limited
- ICON Investments Three Limited
- ICON Investments Four Unlimited Company
- ICON Investments Five Unlimited Company

*(c) Contractual obligations*

The following represents Group contractual obligations and commercial commitments as at 31 December 2016:

| | | Payments due by period | | | |
|---|---|---|---|---|---|
| | **Total $'000** | **Less than 1 year $'000** | **1 to 3 years $'000** | **3 to 5 years $'000** | **More than 5 years $'000** |
| Operating lease commitments | 152,514 | 34,682 | 49,577 | 28,123 | 40,132 |
| Capital commitments | 8,322 | 8,322 | - | - | - |
| Senior Notes | 350,000 | - | - | 350,000 | - |
| Interest on Senior Notes | 50,960 | 12,740 | 25,480 | 12,740 | - |
| **Total** | **561,796** | **55,744** | **75,057** | **390,863** | **40,132** |

The Group expects to spend approximately $45 million in the next 12 months on further investments in information technology, the expansion of existing facilities and the addition of new offices. The Group believes that it will be able to fund additional foreseeable cash needs for the next twelve months from cash flow from operations and existing cash balances. In the future, the Group may consider acquiring businesses to enhance service offerings and global presence. Any such acquisitions may require additional external financing and the Group may, from time to time, seek to obtain funds from public or private issues of equity or debt securities. There can be no assurance that such financing will be available on terms acceptable to the Group.

## 29. Litigation

The Group is not party to any litigation or other legal proceedings that the Group believes could reasonably be expected to have a material adverse effect on the Group's business, results of operations and financial position.

## 30. Related parties

*(i) Transactions with Directors and Executive Officers*

The total compensation of the Directors and Executive Officers (key management remuneration) for the years ended 31 December 2016 and 2015 was as follows:

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| Salary and fees | **3,606** | 3,642 |
| Bonus | **1,133** | 4,807 |
| Other benefits | **119** | 115 |
| Pension contributions | **393** | 416 |
| Share based payments | **16,534** | 14,038 |
| Total | **21,785** | 23,018 |

Details of ordinary shares, share options, RSUs and PSUs held by the Directors and Executive Officers are set out in note 9.

Details of transactions entered into by Directors and Key Executive Officers in shares and share options of the Company during the year ended 31 December 2016 were as follows:

**Share options exercised and sold**

| **Name** | **Number of Share Options** | **Average Exercise Price** | **Average Vest Price** |
|---|---|---|---|
| Dr. Steve Cutler | 27,921 | $35.57 | $76.38 |
| Brendan Brennan | 8,025 | $30.94 | $76.11 |
| Prof. William Hall | 8,500 | $36.35 | $83.21 |
| Dr. Ronan Lambe | 2,000 | $22.26 | $76.00 |
| Thomas Lynch | 6,000 | $24.50 | $70.76 |
| Diarmaid Cunningham | 9,910 | $29.33 | $73.16 |

**Shares sold**

| | **Number of Shares** | **Sales Price** |
|---|---|---|
| Dr. John Climax | 400 | $84.13 |

## 30. Related parties (continued)

**RSUs vested**

| | Number of Shares | Average Vest Price |
|---|---|---|
| Dr. Steve Cutler | 91,594 | $67.45 |
| Brendan Brennan | 33,111 | $67.46 |
| Ciaran Murray | 214,218 | $68.31 |
| Diarmaid Cunningham | 14,768 | $67.61 |

**RSUs sold**

| | Number of Shares | Average Sales Price |
|---|---|---|
| Dr. Steve Cutler | 73,768 | $70.31 |
| Brendan Brennan | 31,750 | $70.38 |
| Ciaran Murray | 244,216 | $72.61 |
| Diarmaid Cunningham | 14,860 | $71.56 |

*(ii) Other related party transactions*

Subsidiaries of the Company earned revenue of $100,000 (2015: $100,000) from Dignity Sciences Limited during the year. Dr. John Climax is Chief Executive Officer and both Dr. John Climax and Dr. Ronan Lambe are Directors and shareholders of Dignity Sciences Limited. $45,700 was recorded as due from Dignity Sciences Limited at 31 December 2016. The contract terms were agreed on an arm's length basis.

On 22 July 2016, Mr. Thomas Lynch retired as a Director of the Company, having previously resigned as Chairman of the Company in March 2016. The Company entered into an agreement with a company controlled by Mr. Lynch, for the provision of consultancy services for a period of three years from 1 August 2016, at an agreed fee of €231,750 ($256,315) per annum. €96,560 was recorded as due to Mr. Lynch under the terms of this agreement at 31 December 2016. Mr. Lynch also agreed to certain restrictions that will apply to him during the period of the consultancy agreement including non-disclosure, non-competition and non-solicitation.

## 31. Subsequent events

On 1 March 2017, Mr. Ciaran Murray transitioned from Chief Executive Officer to Executive Chairman of the Board of Directors and Dr. Steve Cutler was appointed Chief Executive Officer. On this date, Declan McKeon stepped down as Chairman of the Board of Directors and was appointed lead independent director.

## 32. Subsidiary undertakings

As at 31 December 2016 the Group had the following principal subsidiary undertakings:

| Name | Registered Office | Nature of business | Proportion held by Group |
| --- | --- | --- | --- |
| ICON Clinical Research, S.A. | Avenida Leandro N. Alem 1110, Piso 13°, Ciudad Autónoma de Buenos Aires, Argentina | Clinical research services | 100% |
| ICON Clinical Research PTY Limited | Suite 201, Level 2, 2-4 Lyon Park Road, North Ryde, NSW 2113 Australia | Clinical research services | 100%* |
| ICON Clinical Research Austria GmbH | Pyrkergasse 10/6, 1190 Vienna, Austria | Clinical research services | 100% |
| DOCS International Belgium N.V. | Interleuvenlaan 62, 3001 Heverlee, Belgium | Clinical research services | 100% |
| ICON Pesquisas Clínicas LTDA. | Av. Ibirapuera 2332, Torre II 4º Andar, São Paulo, SP, Brazil CEP 04028-003 | Clinical research services | 100%* |
| ICON Clinical Research EOOD | 2A, Saborna Str., 4th floor, Sofia – 1000, Republic of Bulgaria | Clinical research services | 100% |
| ICON Clinical Research (Canada) Inc. | 7405 Trans-Canada Highway, Suite 300 Saint-Laurent, Quebec, H4T 1Z2 Canada | Clinical research services | 100% |
| Oxford Outcomes LTD. | 19th Floor, 885 West Georgia Street, Vancouver BC, V6C 3H4 Canada | Clinical research services | 100% |
| ICON Chile Limitada | Huerfanos 770, Piso 4, Oficina 402, Santiago, Chile | Clinical research services | 100% |
| ICON Clinical Research (Beijing No.2) Co., Ltd | Room 335, No.8, An Ning Zhuang East Road, Haidian District, Beijing, China | Clinical research services | 100% |

## 32. Subsidiary undertakings

| Name | Registered Office | Nature of business | Proportion held by Group |
|---|---|---|---|
| ICON Clinical Research (Beijing) Co., Ltd | Room B1101, Tower No. 1, No. 36 North 3rd Ring Road East, Dong Cheng District, Beijing, 100013 China | Clinical research services | 100% |
| Ispitivanja ICON d.o.o ICON Research Ltd. | Zagreb, Radnicka cesta 80, Croatia | Clinical research services | 100% |
| ICON Clinical Research s.r.o. | V parku 2335/20, Praha 4 - Chodov, PSČ 148 00 Czech Republic | Clinical research services | 100% |
| DOCS International Nordic Countries A/S | Havnegade 29, 1058 København K, Denmark | Clinical research services | 100% |
| DOCS International Finland Oy | Mannerheimintie 12B, 00100 Helsinki, Finland | Clinical research services | 100% |
| DOCS International France S.A.S. | 55 Avenue des Champs Pierreux, Immeuble le Capitole, 92000 Nanterre, France | Clinical research services | 100% |
| ICON Clinical Research S.A.R.L. | 55 Avenue des Champs Pierreux, Immeuble le Capitole, 92000 Nanterre, France | Clinical research services | 100% |
| DOCS International Germany GmbH | Theresienhöhe 28, 80339 München, Germany | Clinical research services | 100% |
| ICON Clinical Research GmbH | Heinrich-Hertz-Straße 26, 63225, Langen, Hessen, Germany | Clinical research services | 100% |
| ICON Clinical Research Hong Kong Limited | Level 43, A/A Tower, 183 Electric Road, North Point, Hong Kong | Clinical research services | 100% |
| ICON Klinikai Kutató Korlátolt Felelősségű Társaság (ICON Clinical Research Limited Liability Company) | 1037 Budapest, Szépvölgyi út 39., Hungary | Clinical research services | 100% |

## 32. Subsidiary undertakings

| Name | Registered Office | Nature of business | Proportion held by Group |
|---|---|---|---|
| ICON Clinical Research India Private Limited | RMZ Millenia Business Park, Building 3A, 2nd Floor, No. 143, Dr. M G R Road, Kandanchavady, Chennai, Tamil Nadu - 600096 India | Clinical research services | 100% |
| DOCS Resourcing Limited | South County Business Park, Leopardstown, Dublin 18, Republic of Ireland | Clinical research services | 100% |
| ICON Clinical International Unlimited Company | South County Business Park, Leopardstown, Dublin 18, Republic of Ireland | Clinical research services | 100% |
| ICON Clinical Research Limited | South County Business Park, Leopardstown, Dublin 18, Republic of Ireland | Clinical research services | 100%* |
| ICON Clinical Research Property Development (Ireland) Limited | South County Business Park, Leopardstown, Dublin 18, Republic of Ireland | Property management company | 100%* |
| ICON Holdings Unlimited Company | South County Business Park, Leopardstown, Dublin 18, Republic of Ireland | Investment holding company | 100%* |
| ICON Holdings Clinical Research International Limited | South County Business Park, Leopardstown, Dublin 18, Republic of Ireland | Investment holding company | 100% |
| ICON Investments Five Unlimited Company | South County Business Park, Leopardstown, Dublin 18, Republic of Ireland | Investment holding and financing company | 100%* |
| ICON Investments Four Unlimited Company | South County Business Park, Leopardstown, Dublin 18, Republic of Ireland | Investment holding and financing company | 100%* |
| ICON Clinical Research Israel LTD. | 6 Haba'al Shem Tov st., North Industrial Area, Lod, Israel, 7128906 | Clinical research services | 100% |
| DOCS Italia S.R.L. | Via Benigno Crespi, 23, 20159 Milano, Italy | Clinical research services | 100% |

## 32. Subsidiary undertakings

| Name | Registered Office | Nature of business | Proportion held by Group |
|---|---|---|---|
| ICON Japan K.K. | 6F-7F MD Kanda Building,<br>9-1 Kanda-Mitoshirocho,<br>Chiyoda-Ku,<br>Tokyo, 101-0053<br>Japan | Clinical research services | 100%* |
| Niphix G.K. | 21-7 Kabutocho,<br>Nihonbashi, Chuo-ku,<br>Tokyo, 103-0026<br>Japan | Clinical research services | 100% |
| ICON Investments Limited | PO Box 76,<br>Kleinwort Benson House,<br>Wests Centre,<br>St. Helier, JE4 8PQ<br>Jersey | Investment holding company | 100%* |
| ICON Clinical Research Korea Yuhan Hoesa | 18th Floor,<br>Capital Tower,<br>142, Teheran-ro,<br>Gangnam-gu,<br>Seoul,<br>135-924<br>Republic of Korea | Clinical research services | 100% |
| ICON CRO Malaysia SDN. BHD. | Level 11,<br>1 Sentral,<br>Jalan Travers,<br>Kuala Lumpur Sentral,<br>50470 Kuala Lumpur,<br>Malaysia | Clinical research services | 100% |
| ICON Clinical Research México, S.A. de C.V. | Av. Barranca del Muerto 329 3rd Floor,<br>Col. San Jose Insugentes,<br>03900 Mexico D.F. | Clinical research services | 100% |
| DOCS Insourcing B.V. | Boeing Avenue 62-68,<br>1119PE Schiphol-Rijk,<br>Netherlands | Clinical research services | 100% |
| DOCS International B.V. | Boeing Avenue 62-68,<br>1119PE Schiphol-Rijk,<br>Netherlands | Clinical research services | 100% |
| ICON Clinical Research (New Zealand) Limited | Plaza Level,<br>41 Shortland Street,<br>Auckland,<br>New Zealand 1010 | Clinical research services | 100% |
| ICON Clinical Research Peru S.A. | Av. Paseo de la Republica 5895,<br>Oficina 606,<br>Miraflores,<br>Lima 18,<br>Peru | Clinical research services | 100% |

### 32. Subsidiary undertakings

| Name | Registered Office | Nature of business | Proportion held by Group |
|---|---|---|---|
| ICON Clinical Research Services Philippines, Inc. | 24th Floor Salcedo Towers, 169 H.V. Dela Costa Street, Salcedo Village, Makati City, Philippines 1227 | Clinical research services | 100% |
| DOCS International Poland Sp. z o.o. | Ul. Grojecka 5, 02-019 Warsaw, Poland | Clinical research services | 100% |
| ICON Clinical Research Sp. z o.o. | Al. Jerozolimskie 56C, 00-803, Warsaw, Poland | Clinical research services | 100%* |
| ICON Clinical Research S.R.L. | Calea Floreasca, Nr 133-137, Et. 3, Bucuruesti, Sector 1, Romania | Clinical research services | 100% |
| ICON Clinical Research (Rus) LLC | 24D Smolnaya Street, Moscow, 125445, Russian Federation | Clinical research services | 100% |
| ICON Clinical Research d.o.o. Beograd | 4th Floor, Bulevar Zorana Djindjica 64a, 11070 Belgrade, Serbia | Clinical research services | 100% |
| ICON Clinical Research (Pte) Limited | 24 Raffles Place #24-03, Clifford Centre, Singapore 048621 | Clinical research services | 100% |
| ICON Clinical Research Slovakia, s.r.o. | Suché mýto 1, 811 03 Bratislava, Slovak Republic | Clinical research services | 100% |
| ICON Clinical Research España, S.L. | Calle Josep Pla, Numero 2, Torre Diagonal Mar, Piso 11, Modulo 1, Barcelona, Spain | Clinical research services | 100% |
| DOCS International Sweden AB | Gustav III Boulevard 34, 5th floor, 169 73 Solna, Sweden | Clinical research services | 100% |
| DOCS International Switzerland GmbH | Gewerbestrasse 24, 4123 Allschwil, Switzerland | Clinical research services | 100% |
| ICON Clinical Research (Switzerland) GmbH | Gewerbestrasse 24, 4123 Allschwil, Switzerland | Clinical research services | 100% |

### 32. Subsidiary undertakings

| Name | Registered Office | Nature of business | Proportion held by Group |
|---|---|---|---|
| ICON Clinical Research Taiwan Limited | 2F, No. 96, Sec. 1, Chien Kou North Road, Taipei 10495, Taiwan, R.O.C. | Clinical research services | 100% |
| ICON Clinical Research (Thailand) Limited | 1 Empire Tower, 24th Floor, Unit 2408, South Sathorn Road, Yannawa, Sathorn, Bangkok, 10120 Thailand | Clinical research services | 100% |
| ICON Ankara Klinik Arastirma Dis Ticaret Anonim Sirketi | Sogutozu mah, Eskisehir Yolu Cad.2176., SK No.9, Posta Kodu: 06510, Cankaya Ankara, Turkey | Clinical research services | 100% |
| Aptiv Solutions (UK) Ltd | 100 Park Drive, Milton Park, Abingdon, Oxfordshire, OX14 4RY United Kingdom | Clinical research services | 100% |
| DOCS International UK Limited | Concept House, 6 Stoneycroft Rise, Chandlers Ford, Eastleigh, Hampshire, SO53 3LD United Kingdom | Clinical research services | 100% |
| ICON Development Solutions Limited | Concept House, 6 Stoneycroft Rise, Chandlers Ford, Eastleigh, Hampshire, SO53 3LD United Kingdom | Clinical research services | 100% |
| DOCS Ukraine LLC | 4th Floor, St. Poleva 24, Kiev, Ukraine, 03056 | Clinical research services | 100% |
| ICON Clinical Research LLC | 4th Floor, St. Poleva 24, Kiev, Ukraine, 03056 | Clinical research services | 100% |

### 32. Subsidiary undertakings

| Name | Registered Office | Nature of business | Proportion held by Group |
|---|---|---|---|
| ICON Early Phase Services, LLC | 8307 Gault Lane,<br>San Antonio,<br>TX 78209-1015<br>USA | Clinical research services | 100% |
| Beacon Bioscience, Inc | 2100 Pennbrook Parkway,<br>North Wales,<br>PA 19454<br>USA | Clinical research services | 100% |
| C4 MedSolutions, LLC | 780 Township Line Road,<br>Yardley,<br>PA 19067<br>USA | Clinical research services | 100% |
| CHC Group, LLC | 780 Township Line Road,<br>Yardley,<br>PA 19067<br>USA | Clinical research services | 100% |
| Global Pharmaceutical Strategies Group, LLC | 780 Township Line Road,<br>Yardley,<br>PA 19067<br>USA | Clinical research services | 100% |
| ICON Clinical Research LLC | 2100 Pennbrook Parkway,<br>North Wales,<br>PA 19454<br>USA | Clinical research services | 100% |
| ICON Laboratory Services, Inc. | 123 Smith Street,<br>Farmingdale,<br>NY 11735<br>USA | Clinical research services | 100% |
| ICON US Holdings Inc. | 2100 Pennbrook Parkway,<br>North Wales,<br>PA 19454<br>USA | Clinical research services | 100% |
| MMMM Group, LLC | 780 Township Line Road,<br>Yardley,<br>PA 19067<br>USA | Clinical research services | 100% |
| PriceSpective LLC | 2100 Pennbrook Parkway,<br>North Wales,<br>PA 19454<br>USA | Clinical research services | 100% |
| PubsHub LLC | 780 Township Line Road,<br>Yardley,<br>PA 19067<br>USA | Clinical research services | 100% |

### 32. Subsidiary undertakings

| Name | Registered Office | Nature of business | Proportion held by Group |
|---|---|---|---|
| PMG Research of Christie Clinic, LLC | 101 West University Avenue, Champaign, IL 61820 USA | Clinical research services | 100% |
| DOCS Global, Inc. | 2100 Pennbrook Parkway, North Wales, PA 19454 USA | Clinical research services | 100% |
| Managed Care Strategic Solutions, L.L.C. | 780 Township Line Road, Yardley, PA 19067 USA | Clinical research services | 100% |
| PMG Research of Charlotte, LLC | 1700 Abbey Place, Suite 201, Charlotte, North Carolina 28209 USA | Clinical research services | 100% |
| PMG Research of Hickory, LLC | 1781 Tate Boulevard SE, Suite 202, Hickory, North Carolina 28602 USA | Clinical research services | 100% |
| PMG Research of Raleigh, LLC | 3521 Haworth Drive, Suite 100, Raleigh, North Carolina 27609 USA | Clinical research services | 100% |
| PMG Research of Rocky Mount, LLC | 901 N. Winstead Avenue, Rocky Mount, North Carolina 27804 USA | Clinical research services | 100% |
| PMG Research of Salisbury, LLC | 410 Mocksville Avenue, Salisbury, North Carolina 28144 USA | Clinical research services | 100% |
| PMG Research of Wilmington, LLC | 1907 Tradd Court, Wilmington, North Carolina 28401 USA | Clinical research services | 100% |
| PMG Research of Winston-Salem, LLC | 1901 S. Hawthorne Road, Suite 306, Winston-Salem, North Carolina 27103 USA | Clinical research services | 100% |

## 32. Subsidiary undertakings

| Name | Registered Office | Nature of business | Proportion held by Group |
|---|---|---|---|
| PMG Research, Inc. | 4505 Country Club Rd., Suite 110, Winston-Salem, NC 27104 USA | Clinical research services | 100% |
| Complete Healthcare Communications LLC | 780 Township Line Road, Yardley, PA 19067 USA | Clinical research services | 100% |
| Complete Publication Solutions, LLC | 780 Township Line Road, Yardley, PA 19067 USA | Clinical research services | 100% |
| PMG Research of Charleston, LLC | 180 Wingo Way, Suite 203, Mt. Pleasant, South Carolina 29464 USA | Clinical research services | 100% |
| PMG Research of Bristol, LLC | 1958 West State Street, Bristol, Tennessee 37620 USA | Clinical research services | 100% |
| Addplan Inc | 2100 Pennbrook Parkway, North Wales, Montgomery County, PA 19454 United States | Clinical research services | 100% |
| Clinical Research Management, Inc. | 1265 Ridge Road, Hinckley, OH 44233 United States | Clinical research services | 100% |

* majority of which is held directly

## 33. Approval of financial statements

The Board of Directors approved these financial statements on 25 April 2017.

# Company Statement of Financial Position

*for the year ended 31 December 2016*

| | Note | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|---|
| **ASSETS** | | | |
| **Non-current assets** | | | |
| Property, plant and equipment | *1* | **329** | 389 |
| Intangible assets | *2* | **62** | 114 |
| Investment in subsidiaries | *3* | **346,406** | 355,853 |
| Deferred tax asset | *4* | **548** | 519 |
| **Total non-current assets** | | **347,345** | 356,875 |
| **Current assets** | | | |
| Other current assets | *5* | **3,394** | 3,056 |
| Amounts due from subsidiary undertakings | *6* | **410,730** | 149,989 |
| Current taxes receivable | | **51** | 16 |
| Cash and cash equivalents | | **32,294** | 1,169 |
| **Total current assets** | | **446,469** | 154,230 |
| **Total assets** | | **793,814** | 511,105 |
| **EQUITY** | | | |
| Share capital | | **4,692** | 4,719 |
| Share premium | | **252,977** | 242,864 |
| Other undenominated capital | | **809** | 715 |
| Share based payment reserve | | **120,241** | 83,781 |
| Other reserves | | **(107,391)** | (109,998) |
| Retained earnings | | **493,294** | 274,888 |
| **Attributable to equity holders** | | **764,622** | 496,969 |
| **Total equity** | | **764,622** | 496,969 |
| **LIABILITIES** | | | |
| **Non-current liabilities** | | | |
| Non-current other liabilities | *7* | **-** | - |
| **Total non-current liabilities** | | **-** | - |
| **Current liabilities** | | | |
| Accounts payable | | **10** | 91 |
| Amounts due to subsidiary undertakings | *6* | **18,816** | - |
| Accrued and other liabilities | *7* | **9,478** | 13,643 |
| Current taxes payable | | **888** | 402 |
| **Total current liabilities** | | **29,192** | 14,136 |
| **Total liabilities** | | **29,192** | 14,136 |
| **Total equity and liabilities** | | **793,814** | 511,105 |

**On behalf of the Board**

Ciaran Murray
*Executive Chairman*

Declan McKeon
*Director*

# Company Statement of Changes in Equity

*for the year ended 31 December 2016*

| | Number of shares | Share Capital $'000 | Share Premium $'000 | Other Undenominated Capital $'000 | Share Based Payment Reserve $'000 | Other Reserves $'000 | Currency Reserve $'000 | Retained Earnings $'000 | Total Equity $'000 |
|---|---|---|---|---|---|---|---|---|---|
| Balance at 1 January 2016 | **54,958,912** | **4,719** | **242,864** | **715** | **83,781** | **6,071** | **(116,069)** | **274,888** | **496,969** |
| **Total comprehensive income for the year** | | | | | | | | | |
| Profit for the year | - | - | - | - | - | - | - | 324,848 | 324,848 |
| **Other comprehensive income** | | | | | | | | | |
| Foreign currency translation | - | - | - | - | - | - | 2,607 | - | 2,607 |
| Total other comprehensive income | - | - | - | - | - | - | 2,607 | - | 2,607 |
| Total comprehensive income for the year | - | - | - | - | - | - | 2,607 | 324,848 | 327,455 |
| **Transactions with owners, recorded directly in equity** | | | | | | | | | |
| Share based payment | - | - | - | - | 40,310 | - | - | - | 40,310 |
| Exercise of share options | 393,240 | 26 | 10,113 | - | - | - | - | - | 10,139 |
| Share issue costs | - | - | - | - | - | - | - | (17) | (17) |
| Issue of restricted share units | 607,878 | 41 | - | - | - | - | - | - | 41 |
| Repurchase of ordinary shares | (1,429,187) | (94) | - | 94 | - | - | - | (110,000) | (110,000) |
| Share repurchase costs | - | - | - | - | - | - | - | (275) | (275) |
| Transfer of exercised and expired share based awards | - | - | - | - | (3,850) | - | - | 3,850 | - |
| Total contributions by and distributions to owners | (428,069) | (27) | 10,113 | 94 | 36,460 | - | - | (106,442) | (59,802) |
| Total transactions with owners | (428,069) | (27) | 10,113 | 94 | 36,460 | - | - | (106,442) | (59,802) |
| **Balance at 31 December 2016** | **54,530,843** | **4,692** | **252,977** | **809** | **120,241** | **6,071** | **(113,462)** | **493,294** | **764,622** |

*As permitted by section 504 of the Companies Act 2014, the Company has not presented a Company income statement. The profit for the 2016 financial year of the Company amounted to $324,848,000 (2015: profit $357,096,000)*

# Company Statement of Changes in Equity

*for the year ended 31 December 2015*

| | Number of shares | Share Capital $'000 | Share Premium $'000 | Other Undenominated Capital $'000 | Share Based Payment Reserve $'000 | Other Reserves $'000 | Currency Reserve $'000 | Retained Earnings $'000 | Total Equity $'000 |
|---|---|---|---|---|---|---|---|---|---|
| Balance at 1 January 2015 | **60,106,780** | **5,059** | **221,943** | **305** | **58,614** | **6,071** | **(59,038)** | **368,553** | **601,507** |
| **Total comprehensive income for the year** | | | | | | | | | |
| Profit for the year | - | - | - | - | - | - | - | 357,096 | 357,096 |
| **Other comprehensive income** | | | | | | | | | |
| Foreign currency translation | - | - | - | - | - | - | (57,031) | - | (57,031) |
| Total other comprehensive income | - | - | - | - | - | - | (57,031) | - | (57,031) |
| Total comprehensive income for the year | - | - | - | - | - | - | (57,031) | 357,096 | 300,065 |
| **Transactions with owners, recorded directly in equity** | | | | | | | | | |
| Share based payment | - | - | - | - | 33,187 | - | - | - | 33,187 |
| Exercise of share options | 773,753 | 52 | 20,929 | - | - | - | - | - | 20,981 |
| Share issue costs | - | - | (8) | - | - | - | - | - | (8) |
| Issue of restricted share units | 276,860 | 18 | - | - | - | - | - | - | 18 |
| Repurchase of ordinary shares | (6,198,481) | (410) | - | 410 | - | - | - | (457,892) | (457,892) |
| Share repurchase costs | - | - | - | - | - | - | - | (889) | (889) |
| Transfer of exercised and expired share based awards | - | - | - | - | (8,020) | - | - | 8,020 | - |
| Total contributions by and distributions to owners | (5,147,868) | (340) | 20,921 | 410 | 25,167 | - | - | (450,761) | (404,603) |
| Total transactions with owners | (5,147,868) | (340) | 20,921 | 410 | 25,167 | - | - | (450,761) | (404,603) |
| **Balance at 31 December 2015** | **54,958,912** | **4,719** | **242,864** | **715** | **83,781** | **6,071** | **(116,069)** | **274,888** | **496,969** |

*As permitted by section 504 of the Companies Act 2014, the Company has not presented a Company income statement. The profit for the 2015 financial year of the Company amounted to $357,096,000 (2014: profit $135,437,00)*

# Company Statement of Cash Flows

*for the year ended 31 December 2016*

| | Note | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|---|
| **Profit for the financial year** | | **324,848** | 357,096 |
| **Adjustments to reconcile net income to net cash generated from operating activities** | | | |
| Depreciation | *1* | **171** | 253 |
| Amortisation of intangible assets | *2* | **59** | 116 |
| Share based payment | | **14,410** | 5,717 |
| Gain on sale of shares in subsidiary | *3* | **-** | (350,000) |
| **Operating cash inflow before changes in working capital** | | **339,488** | 13,182 |
| Increase in other current assets | | **(338)** | (105) |
| Decrease in accounts payable and accrued and other liabilities | | **(4,246)** | (9,995) |
| Decrease in income taxes receivable | | **422** | 429 |
| **Cash provided by operations** | | **335,326** | 3,511 |
| Interest paid on Group facility | | **-** | - |
| Income taxes paid | | **-** | - |
| **Net cash inflow from operating activities** | | **335,326** | 3,511 |
| **Investing activities** | | | |
| Purchase of computer software | | **-** | (70) |
| Purchase of property, plant and equipment | | **(140)** | (85) |
| (Increase)/decrease in amounts due from/to subsidiary undertakings | | **(203,949)** | 52,041 |
| Decrease in investment in subsidiaries | | **-** | 29,046 |
| **Net cash used by investing activities** | | **(204,089)** | 80,932 |
| **Financing activities** | | | |
| Proceeds from disposal of subsidiary | *3* | **-** | 350,000 |
| Proceeds from exercise of share options | | **10,180** | 20,999 |
| Share issuance costs | | **(17)** | (8) |
| Repurchase of ordinary shares | | **(110,000)** | (457,892) |
| Share repurchase costs | | **(275)** | (889) |
| **Net cash used in financing activities** | | **(100,112)** | (87,790) |
| **Net increase in cash and cash equivalents** | | **31,125** | (3,347) |
| Effect of exchange rate changes | | **-** | - |
| Cash and cash equivalents at start of year | | **1,169** | 4,516 |
| **Cash and cash equivalents at end of year** | | **32,294** | 1,169 |

# Notes to Company Financial Statements

*for the year ended 31 December 2016*

## 1. Property, plant and equipment

| | Leasehold improvements $'000 | Computer equipment $'000 | Office furniture & fixtures $'000 | Total $'000 |
|---|---|---|---|---|
| **Cost** | | | | |
| At 1 January 2016 | 767 | 1,724 | 1,240 | 3,731 |
| Additions | - | 83 | 57 | 140 |
| Foreign currency movement | (36) | (172) | (78) | (286) |
| **At 31 December 2016** | **731** | **1,635** | **1,219** | **3,585** |
| **Depreciation** | | | | |
| At 1 January 2016 | 707 | 1,555 | 1,080 | 3,342 |
| Charge for the year | 24 | 91 | 56 | 171 |
| Foreign currency movement | (35) | (156) | (66) | (257) |
| **At 31 December 2016** | **696** | **1,490** | **1,070** | **3,256** |
| **Net book value** | | | | |
| **At 31 December 2016** | **35** | **145** | **149** | **329** |
| At 31 December 2015 | 60 | 169 | 160 | 389 |

| | Leasehold improvements $'000 | Computer equipment $'000 | Office furniture & fixtures $'000 | Total $'000 |
|---|---|---|---|---|
| **Cost** | | | | |
| At 1 January 2015 | 852 | 1,834 | 1,370 | 4,056 |
| Additions | - | 77 | 8 | 85 |
| Foreign currency movement | (85) | (187) | (138) | (410) |
| **At 31 December 2015** | **767** | **1,724** | **1,240** | **3,731** |
| **Depreciation** | | | | |
| At 1 January 2015 | 756 | 1,602 | 1,084 | 3,442 |
| Charge for the year | 26 | 118 | 109 | 253 |
| Foreign currency movement | (75) | (165) | (113) | (353) |
| **At 31 December 2015** | **707** | **1,555** | **1,080** | **3,342** |
| **Net book value** | | | | |
| **At 31 December 2015** | **60** | **169** | **160** | **389** |
| At 31 December 2014 | 96 | 232 | 286 | 614 |

## 2. Intangible assets

| | Computer Software $'000 |
|---|---|
| **Cost** | |
| At 1 January 2015 | 1,148 |
| Additions | 70 |
| Foreign exchange movement | (137) |
| At 31 December 2015 | 1,081 |
| Additions | - |
| Foreign exchange movement | (29) |
| **At 31 December 2016** | **1,052** |
| **Amortisation** | |
| At 1 January 2015 | 951 |
| Charge during the year | 116 |
| Foreign exchange movement | (100) |
| At 31 December 2015 | 967 |
| Charge during the year | 59 |
| Foreign exchange movement | (36) |
| **At 31 December 2016** | **990** |
| **Net book value** | |
| **At 31 December 2016** | **62** |
| At 31 December 2015 | 114 |

### 3. Investment in subsidiaries

| | Investment in Subsidiary Undertakings $'000 | Long Term Advances to Subsidiary Undertakings $'000 | Total $'000 |
|---|---|---|---|
| **Cost** | | | |
| At 1 January 2015 | 436,030 | 32,094 | 468,124 |
| Disposals (1)/repayments (2) | - | (29,046) | (29,046) |
| Share based payment | 27,470 | - | 27,470 |
| Share subscription payment from subsidiary companies | (68,354) | - | (68,354) |
| Foreign exchange movement | (39,293) | (3,048) | (42,341) |
| At 31 December 2015 | 355,853 | - | 355,853 |
| Reclass of imputed interest from amounts due from subsidiaries | 10,466 | - | 10,466 |
| Share based payment | 25,900 | - | 25,900 |
| Share subscription payment from subsidiary companies | (45,813) | - | (45,813) |
| **At 31 December 2016** | **346,406** | **-** | **346,406** |

(1) In July 2015 the Company sold a 13% shareholding in its subsidiary ICON Clinical Research Limited to ICON Investments Four Unlimited Company, a fellow ICON Group company, for total proceeds of US $350 million. This subsidiary had a $nil original cost and therefore the part disposal resulted in a profit on disposal of $350 million which has been recorded in the income statement during the year ended 31 December 2015.

(2) By August 2015, the Company received a full repayment of $29 million for the long term advance from ICON Clinical Research Holdings International.

(3) The functional currency of the Company changed from Euro (€) to US dollars ($) from 1 August 2015. The determination of the USD as the functional currency of the Company reflects consideration of the primary and secondary indicators as set out in IAS 21. The change in functional currency is accounted for prospectively from the date of change. All items were translated using the exchange rate at the date of change and the resulting translated amounts for non-monetary items were recorded at their historical cost from 1 August 2015.

## 4. Deferred taxation

The net deferred tax asset at 31 December 2016 and 31 December 2015 was as follows:

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Deferred taxation assets:** | | |
| Accrued expenses and payments on account | **404** | 392 |
| Property, plant and equipment | **104** | 91 |
| Loans to subsidiaries | **50** | 51 |
| **Total deferred taxation assets** | **558** | 534 |
| **Deferred taxation liabilities:** | | |
| Property, plant and equipment | **(10)** | (15) |
| Accrued expenses and payments on account | **-** | - |
| Total deferred taxation liabilities | **(10)** | (15) |
| **Net deferred taxation asset** | **548** | 519 |

| | **Balance 1 January 2016 $'000** | **Recognised in Income $'000** | **Balance 31 December 2016 $'000** |
|---|---|---|---|
| **Deferred taxation assets** | | | |
| Accrued expenses and payments on account | 392 | 12 | 404 |
| Property plant and equipment | 91 | 13 | 104 |
| Loans to subsidiaries | 51 | (1) | 50 |
| **Total deferred taxation assets** | **534** | **24** | **558** |
| **Deferred taxation liabilities** | | | |
| Property, plant and equipment | (15) | 5 | (10) |
| Accrued expenses and payments on account | - | - | - |
| **Total deferred taxation liabilities** | **(15)** | **5** | **(10)** |
| **Net deferred taxation asset** | **519** | **29** | **548** |

## 4. Deferred taxation (continued)

| | Balance 1 January 2015 $'000 | Recognised in Income $'000 | Balance 31 December 2015 $'000 |
|---|---|---|---|
| **Deferred taxation assets** | | | |
| Accrued expenses and payments on account | 274 | 118 | 392 |
| Property, plant and equipment | 106 | (15) | 91 |
| Loans to subsidiaries | 52 | (1) | 51 |
| **Total deferred taxation assets** | **432** | **102** | **534** |
| **Deferred taxation liabilities** | | | |
| Property, plant and equipment | (21) | 6 | (15) |
| Accrued expenses and payments on account | (1) | 1 | - |
| **Total deferred taxation liabilities** | **(22)** | **7** | **(15)** |
| **Net deferred taxation asset** | **410** | **109** | **519** |

At 31 December 2016 and 31 December 2015 the Company had no operating loss carry forwards for income tax purposes. At 31 December 2016 the Company had an unrecognised deferred tax asset in respect of unutilised foreign tax credits carried forward of $2.5 million (2015: $2.0 million).

## 5. Other current assets

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Prepayments | **379** | 609 |
| Other receivables | **3,015** | 2,447 |
| **Total** | **3,394** | 3,056 |

## 6. Amounts due from/to subsidiary undertakings

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Amounts due from subsidiary undertakings | **410,730** | 149,989 |
| Amounts due to subsidiary undertakings | **(18,816)** | - |

Amounts owed by subsidiary undertakings are non-interest bearing and repayable on demand. All amounts fall due within one year.

## 7. Accrued and other liabilities

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| **Non-current other liabilities** | | |
| Non-current other liabilities | **-** | - |
| **Total** | **-** | - |
| **Current liabilities** | | |
| Accruals and other liabilities | **9,478** | 13,643 |
| **Total** | **9,478** | 13,643 |

## 8. Related parties

The Company entered into the following transactions with subsidiary companies during the period:

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| **Income statement** | | |
| Expenses recharged to subsidiary companies | **22,110** | 24,627 |
| Dividend received from subsidiary company (a) | **322,533** | 10,548 |
| Profit on disposal of interest in subsidiaries (b) | **-** | 350,000 |
| **Total** | **344,643** | 385,175 |
| **Cash flow statement** | | |
| (Increase)/decrease in intercompany debtors and investments | **(203,949)** | 52,041 |
| **Total** | **(203,949)** | 52,041 |

(a) During 2016, the Company received dividends of $322.5 million (2015: $10.5 million) from its subsidiary undertakings ICON Clinical Research Limited ($206.9 million), ICON Holdings Unlimited Company ($111.0 million) and ICON Clinical Research PTY Limited ($4.6 million).

(b) In July 2015 the company sold a 13% shareholding in its subsidiary ICON Clinical Research Limited to ICON Investments Four Unlimited Company, a fellow ICON Group company, for total proceeds of US $350 million. This sale resulted in a profit on disposal of US $350 million which has been recorded in the income statement during the year ended 31 December 2015.

Directors and Executive Officers of the Parent Company are the same as those for the Group. For information on transactions with Directors and Executive Officers see note 30 to the Group financial statements, and for information on Directors' remuneration see note 9.

## 9. Commitments and contingencies

*Operating leases*

The Company has several non-cancellable operating leases that expire over the next 4 years. These leases generally contain renewal options and require the Company to pay all executory costs such as maintenance and insurance. The Company recognised $2.1 million and $2.5 million in rental expense (including rates) for the years ended 31 December 2016 and 31 December 2015 respectively. Future minimum rental commitments for operating leases with non-cancellable terms in excess of one year are as follows:

| | **Minimum rental payments $'000** |
|---|---|
| 2017 | 1,754 |
| 2018 | 1,299 |
| 2019 | 855 |
| 2020 | 759 |
| Thereafter | 341 |
| Total | 5,008 |

## 10. Litigation

The Company is not party to any litigation or other legal proceedings that the Company believes could reasonably be expected to have a material adverse effect on the Company's business, results of operations and financial position.

## 11. Financial instruments

The Company is exposed to various financial risks in the normal course of the business. The Company's financial instruments typically comprise, cash and accounts payable. The main purpose of these financial instruments is to provide finance for the Company's operations. The main risks arising from the Company's financial instruments are credit risk, liquidity risk, interest rate risk, and foreign exchange risk.

*Credit risk*

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Credit risk in respect of the Company arises on balances due from group companies, and as the group is financially sound and the subsidiary entities that ICON plc the company trades with are in a position to make payments as and when they fall due, the Company has assessed the exposure to credit risk as low.

*Liquidity risk*

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company's liquidity risk arises from the repayment of short term debt and other obligations as they fall due. The Company minimises liquidity risk by ensuring that sufficient cash balances and committed bank lines of credit are available to meet its obligations as they fall due. The Company's bank credit lines and facilities are the same as Group. Details of the Group's bank credit lines and facilities are set out in note 23.

## 11. Financial instruments (continued)

The following table sets out details of the maturity of the Company's financial liabilities into the relevant maturity groupings based on the remaining period from the financial year end date to the contractual maturity date:

**At 31 December 2016**

| | Carrying Amount $'000 | Contractual Cashflows $'000 | 6 mths or less $'000 | 6 to 12 mths $'000 | 1 to 2 years $'000 | 2 to 5 years $'000 | More than 5 years $'000 |
|---|---|---|---|---|---|---|---|
| Accounts payable | (10) | (10) | (10) | - | - | - | - |
| Accruals and other liabilities | (9,478) | (9,478) | (9,478) | - | - | - | - |
| | **(9,488)** | **(9,488)** | **(9,488)** | **-** | **-** | **-** | **-** |

**At 31 December 2015**

| | Carrying Amount $'000 | Contractual Cashflows $'000 | 6 mths or less $'000 | 6 to 12 mths $'000 | 1 to 2 years $'000 | 2 to 5 years $'000 | More than 5 years $'000 |
|---|---|---|---|---|---|---|---|
| Accounts payable | (91) | (91) | (91) | - | - | - | - |
| Accruals and other liabilities | (13,643) | (13,643) | (13,643) | - | - | - | - |
| | **(13,734)** | **(13,734)** | **(13,734)** | **-** | **-** | **-** | **-** |

*Foreign currency risk*

While the functional currency of the Company is USD, the functional currency of the branches is the Euro. As a consequence, the results, when translated into U.S. dollars, could be affected by fluctuations in exchange rates against the U.S. dollar. At 31 December 2016 the Company had $nil US dollar denominated bank loans (2015: $nil).

*Interest rate risk*

The Company finances its operations through a mixture of shareholders' funds, borrowings and working capital. The Company borrows in desired currencies at both fixed and floating rates of interest. In general the Company borrows at floating rates of interest but may borrow at fixed rates depending on rates available. The Company determines the level of borrowings at fixed rates of interest having regard to current market rates and future trends.

*Fair values*

Financial instruments are measured in the statement of financial position at fair value using a fair value hierarchy of valuation inputs. The hierarchy prioritises the inputs into three levels based on the extent to which inputs used in measuring fair value are observable in the market. Each fair value measurement is reported in one of three levels, which is determined by the lowest level input that is significant to the fair value measurement in its entirety. These levels are:

## 11. Financial instruments (continued)

Level 1: Inputs are based upon unadjusted quoted prices for identical instruments traded in active markets.

Level 2: Inputs are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuation techniques for which all significant assumptions are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3: Inputs are generally unobservable and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability.

The carrying values of amounts due from subsidiary undertakings, cash and cash equivalents, other current assets, accounts payable and accruals and other liabilities are carried at amortised cost and assumed to be approximate to their fair values due to the short term nature of these balances.

Amounts owed by subsidiary undertakings are non-interest bearing and repayable on demand. All amounts are therefore recorded as due within one year. Fair value is deemed to equal carrying value on this basis.

Each category of asset and liability has remained within the same level of hierarchy as the prior year as there has been no change in the extent to which the inputs used in measuring fair value are or are not observable within the market.

## 12. Approval of financial statements

The Board of Directors approved the Company financial statements on 25 April 2017.

# Reconciliation from IFRS to US Accounting Policies

The financial statements of the Group set out on pages 15 to 107 have been prepared in accordance with International Financial Reporting Standards ("IFRS"), as adopted by the European Union ("EU IFRS"), which differ in certain significant respects from generally accepted accounting principles applicable in the U.S. ("U.S. GAAP"). The material differences as they apply to the Group's financial statements are as follows:

### (a) Financial statement format

The format of the financial statements and certain note disclosures differ under U.S. GAAP from those under EU IFRS. The Group prepared a U.S. Securities and Exchange Commission Form 20-F Report which was made available to all shareholders in March 2017. The financial statements included in such Form 20-F are prepared in accordance with U.S. GAAP.

### (b) Merger with PRAI

The Group accounts for business combinations under EU IFRS in accordance with the IFRS 3 *Business Combinations*. As permitted by IFRS 1 *First Time Adoption of International Financial Reporting Standards* the Group has only restated business combinations from 1 June 2001 onwards. Business combinations prior to this date have not been restated. In addition, goodwill has no longer been amortised since 1 June 2001, but rather is tested annually for impairment. U.S. GAAP adopts different criteria to EU IFRS for establishing the method of accounting to be adopted for business combinations. On 28 January 2000 the Group completed a transaction with Pacific Research Associates Inc. ("PRAI"), a Group specialising in data management, statistical analysis and medical and regulatory consulting based in San Francisco, USA. The merger with PRAI was accounted for using acquisition accounting principles in accordance with EU IFRS whilst U.S. GAAP required that the merger be accounted for using the pooling-of-interest method of accounting. U.S. GAAP pooling-of-interest accounting has resulted in a number of adjustments. Most significantly

(i) the Group's historic US GAAP financial statements have been restated to reflect the combined results of ICON and PRAI;

(ii) the costs of the merger were expensed for U.S. GAAP purposes and included in the cost of acquisition for IFRS;

(iii) goodwill arising on IFRS has been amortised over its expected useful life up to 31 May 2001. No goodwill arose on the merger under U.S. GAAP;

(iv) the tax charge arising on the conversion of PRAI from an S-Corporation to a C-Corporation is treated as a pre-acquisition charge under IFRS.

### (c) Share based payment expense

IFRS requires that the fair value of share based payments be expensed to the income statement over the period the related services are received, with a corresponding increase in equity. In the year ending 31 December 2016, the Group has accounted for share based payments under U.S. GAAP in accordance with *FASB ASC 718, Compensation – Stock Compensation*, which also requires that the fair value of share based payments be expensed to the income statement over the period the related services are received, with a corresponding increase in equity.

There is a difference in recorded expense because firstly different periods are in scope for both treatments due to the different effective dates under both standards and secondly due to different models used to calculate the fair value of options. Under US GAAP the Black-Scholes model was used for the calculation of the expense, whereas under IFRS the binomial model has been used.

US GAAP requires that the accelerated graded vesting attribution approach is applied in respect of awards with graded vesting. IFRS requires that each instalment of an award where there is graded vesting is treated as a separate grant with a different fair value. Each instalment is therefore separately measured and charged to the Income Statement over the related vesting period. This results in accelerated expense recognition under IFRS.

### (d) Deferred tax assets

IFRS requires that the fair value of share based payments, including share options issued to employees, is expensed to the income statement over the period the related services are received, with a corresponding increase in equity. Under U.S. tax law the Group receives a tax deduction when U.S. employee share options are exercised. This deduction is measured as the intrinsic value of the share options at the date the options are exercised. Therefore, the tax deduction generally arises in different amounts and in different periods from compensation cost recognised in the financial statements.

Under US GAAP, FASB ASC 740, *Income Taxes*, the Group has recognised a deferred tax asset for the cumulative amount of compensation cost recognised in the financial statements for options that will result in a future tax deduction. A similar deferred tax asset is also recognised under IFRS for options that will result in a future tax deduction, however, under IAS 12 *Income Taxes* if the tax deduction available in future periods is not known at the end of the period it is estimated based on information available at the end of the period. As the tax deduction is dependent upon the Group's share price at the exercise date, the measurement of the deductible temporary difference is based on the Group's share price at the end of the period. Where the amount of the estimated future tax deduction exceeds the amount of the related cumulative remuneration expense, the deferred tax associated with the excess is recognised directly in equity.

### (e) Forward-looking statements

To the extent any statements made in this annual report deal with information that is not historical, these statements are necessarily forward-looking. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of the Group's control. Any forward-looking statement made by the Group is based only on information currently available as at the time of publication of this report. Forward-looking statements are subject to the occurrence of many events outside of the Group's control and are subject to various risk factors that would cause our results to differ materially from those expressed in any forward-looking statement. These risk factors described in Appendix A on pages 125 to 138 include, without limitation, the inherent risk of dependence on pharmaceutical and biotechnology industries and certain clients, termination or delay of large contracts, risk of cost overruns, the risk of clinical outcomes, regulatory risks and market competition.

### (f) IAS 19R Defined Benefit Pensions

The Group has recognised the net interest expense of the defined benefit pension scheme within payroll costs (operating expenses) in the income statement under IAS19R which is consistent with the US GAAP treatment of this cost. Additional net credits related to the defined benefit pension schemes refer to the adjustment required to reverse the application of the corridor approach permitted under US GAAP ($33k) and the different net interest expense recorded under IFRS and US GAAP ($(219)).

The following is a summary of the material adjustments to profit for the financial year and shareholders' equity, which would be required, had the financial statements been prepared in accordance with U.S. GAAP:

# Reconciliation from IFRS to US Accounting Policies *(continued)*

*(i) Effect on profit for the financial year*

| | **Year ended 31 December 2016 $'000** | Year ended 31 December 2015 $'000 |
|---|---|---|
| Profit for the financial year attributable to equity holders as stated under IFRS | **267,960** | 240,024 |
| **US GAAP adjustments** | | |
| Share based payment expense under IFRS | **40,310** | 33,187 |
| Share based payment expense under U.S. GAAP | **(40,343)** | (33,317) |
| Deferred tax adjustments on share based payments | **(5,562)** | 99 |
| Additional costs defined benefit pension scheme | **(186)** | (454) |
| Net income as stated under U.S. GAAP | **262,179** | 239,539 |
| **Basic earnings per Ordinary Share under U.S. GAAP** | **$4.75** | $4.08 |
| **Diluted earnings per Ordinary Share under U.S. GAAP** | **$4.65** | $3.97 |

*(ii) Effect on shareholders' equity*

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Shareholders' equity as stated under IFRS | **977,467** | 797,130 |
| **US GAAP adjustments** | | |
| Goodwill arising on merger with PRAI | **(15,010)** | (15,010) |
| Amortisation of goodwill arising on merger with PRAI | **1,001** | 1,001 |
| Deferred tax adjustments on share based payments | **(18,284)** | (20,025) |
| Shareholders' equity as stated under U.S. GAAP | **945,174** | 763,096 |

*(iii) Effect on total assets*

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Total assets as stated under IFRS | **1,858,136** | 1,751,243 |
| **US GAAP adjustments** | | |
| Goodwill arising on merger with PRAI | **(15,010)** | (15,010) |
| Amortisation of goodwill arising on merger with PRAI | **1,001** | 1,001 |
| Deferred tax adjustments on share based payments | **(18,284)** | (20,025) |
| Total assets as stated under U.S. GAAP | **1,825,843** | 1,717,209 |

# Reconciliation from IFRS to US Accounting Policies *(continued)*

*(iv) Effect on total liabilities*

| | **31 December 2016 $'000** | 31 December 2015 $'000 |
|---|---|---|
| Total liabilities as stated under IFRS | **880,669** | 954,113 |
| **US GAAP adjustments** | | |
| Offset between deferred tax assets and liabilities | **-** | - |
| Total liabilities as stated under U.S. GAAP | **880,669** | 954,113 |

# Appendix A: Risk Factors

## Risk Related to Our Business and Operations

***We depend on a limited number of clients and a loss of or significant decrease in business from one or more of them could affect our business.***

During the year ended 31 December 2016 45% of our net revenues were derived from our top five customers, with one customer contributing more than 10% of our net revenues during the period (26%). No other customer contributed more than 10% of our net revenues during this period. During the year ended 31 December 2015 49% of our net revenues were derived from our top five customers, with one customer contributing more than 10% of our net revenues during the period (31%). No other customer contributed more than 10% of our net revenues during this period. During the year ended 31 December 2014 53% of our net revenues were derived from our top five customers, with one customer contributing more than 10% of our net revenues during the period (31%). No other customer contributed more than 10% of our net revenues during this period. The loss of, or a significant decrease in business from one or more of these key customers could have a material adverse impact on our results of operations and financial results.

***Many of our contracts are long-term fixed-fee contracts. We would lose money in performing these contracts if the costs of performance exceed the fixed fees for these projects and we were unable to negotiate a change order for the value of work performed.***

Many of our contracts are long-term fixed fee contracts. Revenues on these contracts are agreed in the contract between the Company and the customer and are based on estimated time inputs to the contract. Factors considered in estimating time requirements include the complexity of the study, the number of geographical sites where trials are to be conducted and the number of patients to be recruited at each site. The Company regularly reviews the estimated hours on each contract to determine if the budget accurately reflects the agreed tasks to be performed taking into account the state of progress at the time of review. The Company further endeavours to ensure that changes in scope are appropriately monitored and change orders for additional revenue are promptly negotiated for additional work as necessary. If we were to fail to recognise and negotiate change orders for changes in the resources required or the scope of the work to be performed and the costs of performance of these contracts exceeded their fixed fees it could materially adversely affect our operations and financial results.

***If our clients discontinue using our services, or cancel or discontinue projects, our revenue will be adversely affected and/or we may not receive their business in the future or may not be able to attract new clients.***

Our clients may discontinue using our services completely or cancel some projects either without notice or upon short notice. The termination or delay of a large contract or of multiple contracts could have a material adverse effect on our revenue and profitability. Historically, clients have cancelled or discontinued projects and may in the future cancel their contracts with us for reasons including, amongst others:

- the failure of products being tested to satisfy safety or efficacy requirements;
- unexpected or undesired clinical results of the product;
- a decision that a particular study is no longer necessary or viable;
- poor project performance, quality concerns, insufficient patient enrolment or investigator recruitment; and
- production problems resulting in shortages of the drug.

If we lose clients, we may not be able to attract new ones, and if we lose individual projects, we may not be able to replace them.

***If we fail to attract or retain qualified staff, our performance may suffer.***

Our business, future success and ability to continue to expand operations depends upon our ability to attract, hire, train and retain qualified professional, scientific and technical operating staff. We compete for qualified professionals with other Clinical Research Organisations "CROs", temporary staffing agencies and the in-house departments of pharmaceutical, biotechnology and medical device companies. An inability to attract and retain a sufficient number of high calibre clinical research professionals (in particular, key personnel and executives) at an acceptable cost would impact our ability to provide our services, our future performance and results of operations.

***Our ability to perform clinical trials is dependent upon the ability to recruit suitable willing patients.***

The successful completion of clinical trials is dependent upon the ability to recruit suitable and willing patients on which to test the drug under study. The availability of suitable patients for enrolment on studies is dependent upon many factors including, amongst others, the size of the patient population, the design of the study protocol, eligibility criteria, the referral practices of physicians, the perceived risks and benefits of the drug under study and the availability of alternative medication, including medication undergoing separate clinical trial. Insufficient or inappropriate patient enrolment may result in the termination or delay of a study which could have a material adverse impact on our results of operations.

***Our ability to perform clinical trials is dependent upon our ability to recruit suitable willing investigators.***

We contract with physicians located in hospitals, clinics or other similar sites, who serve as investigators in conducting clinical trials to test new drugs on their patients. Investigators supervise administration of the study drug to patients during the course of the clinical trial. The successful conduct of a clinical trial is dependent upon the integrity, experience and capabilities of the investigators conducting the trial. Insufficient investigator recruitment, which in turn may lead to insufficient or inappropriate patient enrolment, may result in the termination or delay of a study which could have a material adverse impact on our results of operations.

***We rely on third parties for important products and services.***

We depend on certain third parties to provide us with products and services critical to our business. Such services include, amongst others, suppliers of drugs for patients participating in trials, suppliers of kits for use in our central laboratory business, suppliers of reagents for use in our testing equipment and providers of maintenance services for our equipment. The failure of any of these third parties to adequately provide the required products or services or the significant increase in the costs of such products and services could have a material adverse effect on our business.

***Our business depends on the continued effectiveness and availability of our information systems, including the information systems we use to provide our services to our clients, and any system failures of, security breaches of or cyber-attacks to these systems may materially limit our operations or have a material adverse effect on our results of operations.***

Due to the global nature of our business and our reliance on information systems to provide our services, we use web-enabled and other integrated information systems in delivering our services. We intend to further increase the use of these systems and such systems will be either developed internally or provided by or in conjunction with third parties. We also provide access to similar information systems to certain clients in connection with the services we provide them. As the use, scope and complexity of our information systems continue to grow, we are exposed to and will increasingly be exposed to the risks inherent in the development, integration and ongoing operation of evolving information systems, including:

- disruption, impairment or failure of data centres, telecommunications facilities or other key infrastructure platforms;
- security breaches, cyber-attacks or other failures or malfunctions in our application or information systems or their associated hardware or other systems that we have access to or that we rely upon; and
- excessive costs, excessive delays or other deficiencies in or problems with systems development and deployment.

The materialisation of any of these risks may impede our ability to provide services, the processing of data, the delivery of databases and services, and the day-to-day management of our business and could result in the corruption, loss or unauthorised disclosure of proprietary, confidential or other data. While we have disaster recovery plans in place, they might not adequately protect us in the event of a system failure, security breach or cyber-attack. Despite any precautions we take, damage from fire, floods, hurricanes, power loss, telecommunications failures, computer viruses, information system security breaches, cyber attack and similar events at or that impact on our various computer facilities could result in interruptions in the flow of data to our servers and from our servers to our clients. Corruption or loss of data may result in the need to repeat a trial at no cost to the client, but at significant cost to us, or result in the termination of a contract or damage to our reputation. Additionally, significant delays in system enhancements or inadequate performance of new or upgraded systems once completed could damage our reputation and harm our business. Long-term disruptions in the infrastructure caused by events such as security breaches, cyber attack, natural disasters, the outbreak of war, the escalation of hostilities and acts of terrorism, particularly involving cities in which we have offices, could adversely affect our business.

Unauthorised disclosure of sensitive or confidential data, whether through system failure or employee negligence, fraud or misappropriation, could damage our reputation and cause us to lose clients. Similarly, unauthorised access to or through our information systems or those we develop for our clients, whether by our employees or third parties, including a cyber-attack by computer programmers and hackers who may develop and deploy viruses, worms or other malicious software programmes could result in negative publicity, significant remediation costs, legal liability and damage to our reputation and could have a material adverse effect on our results of operations and financial results. In addition, our liability insurance might not be sufficient in type, the cover provided or amount to adequately cover us against claims related to security breaches, cyber-attacks and other related breaches.

***Upgrading the information systems that support our operating processes and evolving the technology platform for our services pose risks to our business.***

Continued efficient operation of our business requires that we implement standardised global business processes and evolve our information systems to enable this implementation. We have continued to undertake significant programmes to optimise business processes with respect to our services. Our inability to effectively manage the implementation and adapt to new processes designed into these new or upgraded systems in a timely and cost-effective manner may result in disruption to our business and negatively affect our operations.

We have entered into agreements with certain vendors to provide systems development and integration services that develop or license to us the IT platform for programmes to optimise our business processes. If such vendors fail to perform as required or if there are substantial delays in developing, implementing and updating the IT platform, our customer delivery may be impaired, and we may have to make substantial further investments, internally or with third parties, to achieve our objectives. Additionally, our progress may be limited by parties with existing or claimed patents who seek to enjoin us from using preferred technology or seek license payments from us.

Meeting our objectives is dependent on a number of factors which may not take place as we anticipate, including obtaining adequate technology-enabled services, creating IT-enabled services that our customers will find desirable and implementing our business model with respect to these services. If we do not keep pace with rapid technological changes in the CRO industry, our products and services may become less competitive or even obsolete. This applies in particular to our ICONIK, Firecrest and ADDPLAN services. Also, increased IT-related expenditures may negatively impact our financial condition, including profitability.

***We rely on our interactive response technologies to provide accurate information regarding the randomisation of patients and the dosage required for patients enrolled in the trials.***

We develop and maintain computer run and web based interactive response technologies to automatically manage the randomisation of patients in trials, assign the study drug, and adjust the dosage when required for patients enrolled in trials we support. An error in the design, programming or validation of these systems could lead to inappropriate assignment or dosing of patients which could give rise to patient safety issues, incorrect dosing of patients, invalidation of the trial and/or liability claims against the Company among other things any of which could have a material effect on our financial conditions and operations.

***Our operations might be impacted by a disruption to travel systems.***

Many of our operations rely on the availability of air or other transportation for the distribution of clinical trial materials, study samples and personnel. While we have developed contingency plans to minimise the impact of such events, a disruption to the availability of air transportation or other travel systems could have a material adverse impact on our ability to provide services and results of operations.

***We may make, or be unable to make, acquisitions in the future, which may lead to disruptions to our ongoing business.***

We have made a number of acquisitions and will continue to review new acquisition opportunities. If we are unable to identify suitable acquisition targets, consummate an acquisition or successfully integrate an acquired company or business, our business may be disrupted. The success of an acquisition will depend upon, among other things, our ability to:

- effectively and quickly assimilate the operations and services or products of the acquired company or business;
- integrate acquired personnel;
- retain and motivate key employees;
- retain customers; and
- minimise the diversion of management's attention from other business concerns.

In the event that the operations of an acquired company or business do not meet our performance expectations, we may have to restructure the acquired company or business or write-off the value of some or all of the assets of the acquired company or business.

***Serious adverse events can occur in the conduct of clinical study trials***

We conduct all phases of clinical trials. Although we have policies and procedures in place, due to the experimental nature of these studies, serious adverse events may arise and are appropriately documented and reported. A serious adverse event that arises could have a material adverse impact on our financial condition and results of operations.

***Our relationships with existing or potential customers who are in competition with each other may adversely impact the degree to which other customers or potential customers use our services, which may adversely affect our results of operations.***

The biopharmaceutical industry is highly competitive, with biopharmaceutical companies each seeking to persuade payers, providers and patients that their drug therapies are better and more cost-effective than competing therapies marketed or being developed by competing firms. In addition to the adverse competitive interests that biopharmaceutical companies have with each other, biopharmaceutical companies also have adverse interests with respect to drug selection and reimbursement with other participants in the healthcare industry, including payers and providers. Biopharmaceutical companies also compete to be first to market with new drug therapies. We regularly provide services to biopharmaceutical companies who compete with each other, and we sometimes provide services to

such customers regarding competing drugs in development. Our existing or future relationships with our biopharmaceutical customers may therefore deter other biopharmaceutical customers from using our services or may result in our customers seeking to place limits on our ability to serve other biopharmaceutical industry participants. In addition, our further expansion into the broader healthcare market may adversely impact our relationships with biopharmaceutical customers, and such customers may elect not to use our services, reduce the scope of services that we provide to them or seek to place restrictions on our ability to serve customers in the broader healthcare market with interests that are adverse to theirs. Any loss of customers or reductions in the level of revenues from a customer could have a material adverse effect on our results of operations, business and prospects.

***We have only a limited ability to protect our intellectual property rights, and these rights are important to our success.***

Our success depends, in part, upon our ability to develop, use and protect our proprietary methodologies, analytics, systems, technologies and other intellectual property. Existing laws of the various countries in which we provide services or solutions offer only limited protection of our intellectual property rights, and the protection in some countries may be very limited. We rely upon a combination of trade secrets, confidentiality policies, nondisclosure, invention assignment and other contractual arrangements, and patent, copyright and trademark laws, to protect our intellectual property rights. These laws are subject to change at any time and certain agreements may not be fully enforceable, which could further restrict our ability to protect our innovations. Our intellectual property rights may not prevent competitors from independently developing services similar to or duplicative of ours. Further, the steps we take in this regard might not be adequate to prevent or deter infringement or other misappropriation of our intellectual property by competitors, former employees or other third parties, and we might not be able to detect unauthorised use of, or take appropriate and timely steps to enforce, our intellectual property rights. Enforcing our rights might also require considerable time, money and oversight, and we may not be successful in enforcing our rights.

We may, in certain circumstances, grant a customer greater rights in intellectual property developed in connection with a contract than we would normally grant. In such situations, we may forego the use of all intellectual property rights we create or develop, which would limit our ability to reuse or deploy that intellectual property for other customers. Any limitation on our ability to provide a service or solution may result in us losing revenue-generating opportunities and may also result in us incurring additional expenses to develop or license new or modified solutions for other projects or customers.

***The biopharmaceutical industry has a history of patent and other intellectual property litigation, and we might be involved in costly intellectual property lawsuits.***

The biopharmaceutical industry has a history of intellectual property litigation, and these lawsuits will likely continue in the future. Accordingly, we may face patent infringement suits by companies that have patents for similar business processes or other suits alleging infringement of their intellectual property rights. Legal proceedings relating to intellectual property could be expensive, take significant time and divert management's attention from other business concerns, regardless of the outcome of the litigation. If we do not prevail in an infringement lawsuit brought against us, we might have to pay substantial damages, and we could be required to stop the infringing activity or obtain a license to use technology on unfavourable terms. Any infringement or other legal processing related to intellectual property could have a material adverse effect on our operations and financial condition.

***We act as legal representative for some clients.***

We act as the legal representative for certain clients in certain jurisdictions. As we believe that acting as legal representative of clients exposes us to a higher risk of liability this service is provided subject to our policy and requires certain preconditions to be met. The preconditions relate to obtaining specific insurance commitments and indemnities from the client to cover the nature of the exposure. However, there is no guarantee that the specific insurance will respond and provide cover or that a client will fulfil its obligations in relation to their indemnity.

# Appendix A: Risk Factors *(continued)*

## Risk Related to Our Industry

***We are dependent on the continued outsourcing of research and development by the pharmaceutical, biotechnology and medical device industries.***

We are dependent upon the ability and willingness of the pharmaceutical, biotechnology and medical device companies to continue to spend on research and development and to outsource the services that we provide. We are therefore subject to risks, uncertainties and trends that affect companies in these industries and that we do not control. We have benefited to date from the tendency of pharmaceutical, biotechnology and medical device companies to outsource clinical research projects. Any downturn in these industries or reduction in spending or outsourcing could materially adversely affect our business. The following could each result in such a downturn:

- if pharmaceutical, biotechnology or medical device companies expanded upon their in-house clinical or development capabilities, they would be less likely to utilise our services;
- if governmental regulations were changed, it could affect the ability of our clients to operate profitably, which may lead to a decrease in research spending and therefore this could have a material adverse effect on our business; and
- if unfavourable economic conditions or disruptions in the credit and capital markets negatively impacted our clients.

***Large pharmaceutical companies are increasingly consolidating their vendor base and entering strategic partnership arrangements with a limited number of outsource providers.***

Large pharmaceutical companies are continually seeking to drive efficiencies in their development processes to both reduce costs associated with the development of new drug candidates and accelerate time to market. As a result, large pharmaceutical companies in particular are increasingly looking to consolidate the number of outsource providers with which they engage, with many entering strategic partnership arrangements with a limited number of outsource providers. The failure to enter strategic partnership arrangements with customers or the loss of existing customers as a result of them entering strategic partnership arrangements with our competitors could have a material adverse impact on our results of operations.

***Increased collaboration amongst pharmaceutical companies in research and development activities may lead to fewer research opportunities.***

Certain pharmaceutical companies have begun to collaborate in seeking to develop new drug candidates. Increased collaboration amongst pharmaceutical companies may lead to fewer research opportunities, which in turn may lead to fewer outsource opportunities for companies within the CRO industry. A reduction in outsource opportunities as a result of this increased collaboration could have a material adverse impact on our results of operations.

***We operate in a highly competitive and dynamic market.***

The CRO industry is highly competitive. In particular, we compete with other large global CROs for strategic relationships with large pharmaceutical companies. If we are unable to retain and renew existing strategic relationships and win new strategic relationships, there would be a material adverse impact on our results. Similarly, we compete with other CROs for work which comes outside of these strategic relationships and being unable to win work outside of these strategic relationships would have a material adverse impact on our results.

The type and depth of services provided by CROs has changed in recent years. Failure to develop and market new services or expand existing service offerings could adversely affect our business and operations. New entrants may also enter the market which would further increase competition and could adversely affect our business and operations.

## Risk Related to Our Financial Results and Financial Position

***Our quarterly results are dependent upon a number of factors and can fluctuate from quarter to quarter.***

Our results of operations in any quarter can fluctuate or differ from expected or forecasted results depending upon or due to, among other things, the number and scope of ongoing client projects, the commencement, postponement, variation cancellation or termination of projects in a quarter, the mix of revenue, cost overruns, employee hiring and other factors. Our net revenue in any period is directly related to the number and percentage of employees who were working on projects billable to the client during that period. We may be unable to compensate for periods of underutilisation during one part of a fiscal period by augmenting revenues during another part of that period. We believe that operating results for any particular quarter are not necessarily a meaningful indication of future results.

Also, if in future quarters, we are unable to achieve efficiencies and our expenses grow faster than our net revenues, our operating margins, profitability and overall financial condition will be materially adversely impacted.

***Our exposure to exchange rate fluctuations could adversely affect our results of operations.***

Our contracts with clients are sometimes denominated in currencies other than the currency in which we incur expenses related to such contracts. Where expenses are incurred in currencies other than those in which contracts are priced, fluctuations in the relative value of those currencies could have a material adverse effect on our results of operations.

In addition, we are also subject to translation exposures as our consolidated financial results are presented in U.S. dollars, while the local results of certain of our subsidiaries are prepared in currencies other than U.S. dollars, including, amongst others, the pound sterling and the euro. Accordingly, changes in exchange rates between the U.S. dollar and those other currencies will affect the translation of a subsidiary's financial results into U.S. dollars for purposes of reporting our consolidated financial results.

***Our effective tax rate may fluctuate from quarter to quarter, which may adversely affect our results of operations.***

Our quarterly effective tax rate has depended and will continue to depend on the geographic distribution of our taxable earnings amongst the multiple tax jurisdictions in which we operate and the tax law in those jurisdictions. Changes in the geographic mix of our results of operations amongst these jurisdictions may have a significant impact on our effective tax rate from quarter to quarter. Changes in tax law in one or more jurisdictions could also have a significant impact on our tax rate and results. In addition, as we operate in multiple tax jurisdictions, we may be subject to audits in certain jurisdictions. These audits may involve complex issues which could require an extended period of time for resolution. The resolution of audit issues may lead to differences, additional taxes, fines or penalties which could have a material adverse impact on our effective tax rate and our financial condition and results.

***Our backlog may not convert to net revenue and the rate of conversion may slow.***

Our backlog consists of potential net revenue yet to be earned from projects awarded by clients. Our backlog at any date is not necessarily a meaningful predictor of future results, due to the potential for the cancellation or delay of projects included in the backlog. No assurances can be given that we will be able to realise this backlog as net revenue. A failure to realise backlog as net revenue could have a material adverse impact on our results of operations. In addition, as the length and complexity of projects underlying our backlog increases, the rate at which backlog converts to net revenue may be slower than in the past. A significant reduction in the rate at which backlog converts to net revenue could have a material impact on our results of operations.

***The Company is exposed to various risks in relation to our cash and cash equivalents and short term investments.***

The Company's treasury function actively manages our available cash resources and invests significant cash balances in various financial institutions to try to ensure optimum returns for our surplus cash balances. These balances are classified as cash and cash equivalents or short term investments depending on the maturity of the related investment. Cash and cash equivalents comprise cash and highly liquid investments with maturities of three months or less. Short term investments comprise highly liquid investments with maturities of greater than three months and minimum "A-" rated fixed and floating rate securities.

Given the global nature of our business, we are exposed to various risks in relation to these balances including liquidity risk, credit risk associated with the counterparties with which we invest, interest rate risk on floating rate securities, sovereign risk (our principle sovereign risk relates to investments in U.S. Treasury funds), and other factors.

Although we have not recognised any significant losses to date on our cash and cash equivalents or short term investments, any significant declines in their market values could have a material adverse effect on our financial position and operating results.

## Risk Related to Political, Legal or Regulatory Environment

***We may lose business opportunities as a result of health care reform and the expansion of managed care organisations.***

Numerous governments, including the U.S. government and governments outside of the U.S., have undertaken efforts to control growing health care costs through legislation, regulation and voluntary agreements with medical care providers and drug companies. If these efforts are successful, pharmaceutical, biotechnology and medical device companies may react by spending less on research and development and therefore this could have a material adverse effect on our business.

In addition to healthcare reform proposals, the expansion of managed care organisations in the healthcare market may result in reduced spending on research and development. Managed care organisations' efforts to cut costs by limiting expenditures on pharmaceuticals and medical devices could result in pharmaceutical, biotechnology and medical device companies spending less on research and development. If this were to occur, we would have fewer business opportunities and our revenues could decrease, possibly materially.

***We may lose business as a result of changes in the regulatory environment.***

Various regulatory bodies throughout the world may enact legislation, rules and guidance which could introduce changes to the regulatory environment for drug development and research. The adoption and implementation of such legislation, rules and guidance is difficult to predict and therefore could have a material adverse effect on our business.

***Failure to comply with the regulations of the U.S. Food and Drug Administration and other regulatory authorities could result in substantial penalties and/or loss of business.***

The U.S. Food and Drug Administration, or FDA, and other regulatory authorities inspect us from time to time to ensure that we comply with their regulations and guidelines, including environmental and health and safety matters. We must comply with the applicable regulatory requirements governing the conduct of clinical trials in all countries in which we operate. If we fail to comply with any of these requirements we could suffer some or all of:

- termination of or delay in any research;
- disqualification of data;
- denial of the right to conduct business;
- criminal penalties;

- other enforcement actions;
- loss of clients and/or business; and
- litigation from clients and/or patients and/or regulatory authorities and/or other affected third parties, and resulting material penalties, damages and costs.

***We are subject to political, regulatory, operational and legal risks associated with our international operations.***

We are one of a small group of organisations with the capability and expertise to conduct clinical trials on a global basis. We believe that this capability to provide our services globally in most major and developing pharmaceutical markets enhances our ability to compete for new business from large multinational pharmaceutical, biotechnology and medical device companies. We have expanded geographically in the past and intend to continue expanding in regions that have the potential to increase our client base or increase our investigator and patient populations. We expect that revenues earned in emerging markets will continue to account for an increasing portion of our total revenues. However, emerging market operations may present several risks, including civil disturbances, health concerns, cultural differences such as employment, regulatory and business practices, compliance with economic sanctions laws and regulations, volatility in gross domestic product, economic and governmental instability, the potential for nationalisation of private assets and the imposition of exchange controls. In addition, operating globally means the Company faces the challenges associated with coordinating its services across different countries, time zones and cultures.

Changes in the political and regulatory environment in the international markets in which we operate such as price or exchange controls could impact our revenue and profitability, and could lead to penalties, sanctions and reputational damages if we are not compliant with those regulations. Political uncertainty and a lack of institutional continuity in some of the emerging, developing or other countries in which we operate could affect the orderly operation of markets in these economies. In addition, in countries with a large and complicated structure of government and administration, national, regional, local and other governmental bodies may issue inconsistent decisions and opinions that could increase our cost of regulatory compliance and/or have a material adverse effect on our business.

Uncertainty of the legal environment in some emerging countries could also limit our ability to enforce our rights. In certain emerging and developing countries we enjoy less comprehensive protection for some of our rights, including intellectual property rights, which could undermine our competitive position.

If any of the above risks or similar risks associated with our international operations were to materialise, our results of operations and financial condition could be materially adversely affected.

***Recent healthcare reform legislation and other changes in the healthcare industry and in healthcare spending could adversely affect our business model, financial condition or results of operations.***

Our results of operations and financial conditions could be affected by changes in healthcare spending and policy. The healthcare industry is subject to changing political, regulatory and other influences. It is possible that following recent executive orders, legislation will be introduced and passed in the United States repealing, modifying or invalidating the current health care reform legislation, in whole or in part, and signed into law. Because of the continued uncertainty about the implementation of the current health care reform legislation, including the potential for further legal challenges or repeal of that legislation, we cannot quantify or predict with any certainty the likely impact of the current health care reform legislation or its repeal on the health care sector, on our customers and ultimately on our financial condition or results of operations, in particular the outsourcing of costs by our customer base to CROs.

***We operate in many different jurisdictions and we could be adversely affected by violations of the Foreign Corrupt Practices Act of 1977 (FCPA), UK Bribery Act of 2010 and similar anti-corruption laws in other jurisdictions.***

The FCPA, UK Bribery Act of 2010 and similar anti-corruption laws in other jurisdictions prohibit companies and their intermediaries from making improper payments for the purpose of obtaining or retaining business. In addition, the FCPA

imposes certain books, records and accounting control obligations on public companies and other issuers. Our internal policies mandate compliance with these anti-corruption laws. We operate in many jurisdictions that have experienced corruption to some degree and in certain circumstances, anti-corruption laws have appeared to conflict with local customs and practices. Despite our training and compliance programs, we cannot assure that our internal control policies and procedures will protect us from acts in violation of anticorruption laws committed by persons associated with us and our continued expansion, including in developing countries, could increase such risk in the future. Violations of the FCPA, the U.K. Anti-Bribery Act of 2010 or other similar anti-corruption laws in other jurisdictions, or even allegations of such violations, could disrupt our business and result in a material adverse effect on our financial condition, results of operations, cash flows and reputation. For example, violations of anti-corruption laws can result in restatements of, or irregularities in, our financial statements as well as severe criminal or civil sanctions. In some cases, companies that violate the FCPA might be debarred by the U.S. government and/or lose their U.S. export privileges. In addition, U.S. or other governments may seek to hold us liable for successor liability FCPA violations or violations of other anticorruption laws committed by companies that we acquire or in which we invest. Changes in anti-corruption laws or enforcement priorities could also result in increased compliance requirements and related costs which could materially adversely affect our business, financial condition, results of operations and cash flows.

***Current and proposed laws and regulations regarding the protection of personal data could result in increased risks of liability or increased cost to us or could limit our service offerings.***

The confidentiality, collection, use and disclosure of personal data, including clinical trial patient-specific information, are subject to governmental regulation generally in the country that the personal data were collected or used. For example, United States federal regulations under the Health Insurance Portability and Accountability Act of 1996, or HIPAA, and as amended in 2014 by the Health Information Technology for Economic and Clinical Health (“HITECH”) Act, require individuals’ written authorisation, in addition to any required informed consent, before Protected Health Information may be used for research. Such regulations specify standards for de-identifications and for limited data sets. We are both directly and indirectly affected by the privacy provisions surrounding individual authorisations because many investigators with whom we are involved in clinical trials are directly subject to them as a HIPAA “covered entity” and because we obtain identifiable health information from third parties that are subject to such regulations. As there are some instances where we are a HIPAA “business associate” of a “covered entity,” we can also be directly liable for mishandling protected health information. Under HIPAA’s enforcement scheme, we can be subject to up to $1.5 million in annual civil penalties for each HIPAA violation.

In the European Union, or EU, personal data includes any information that relates to an identified or identifiable natural person with health information carrying additional obligations, including obtaining the explicit consent from the individual for collection, use or disclosure of the information. In addition, we are subject to EU rules with respect to cross-border transfers of such data out of the EU. The United States, the EU and its member states, and other countries where we have operations, such as Japan, South Korea, Malaysia, the Philippines, Russia and Singapore, continue to issue new privacy and data protection rules and regulations that relate to personal data and health information. Failure to comply with certain certification/registration and annual re-certification/registration provisions associated with these data protection and privacy regulations and rules in various jurisdictions, or to resolve any serious privacy complaints, could subject us to regulatory sanctions, criminal prosecution or civil liability. Federal, state and foreign governments are contemplating or have proposed or adopted additional legislation governing the collection, possession, use or dissemination of personal data, such as personal health information, and personal financial data as well as security breach notification rules for loss or theft of such data. Additional legislation or regulation of this type might, among other things, require us to implement new security measures and processes or bring within the legislation or regulation de-identified health or other personal data, each of which may require substantial expenditures or limit our ability to offer some of our services. Additionally, if we violate applicable laws, regulations or duties relating to the use, privacy or security of personal data, we could be subject to civil liability or criminal prosecution, be forced to alter our business practices and suffer reputational harm. The European data protection framework is being revised as a generally applicable regulation which contains new provisions specifically directed at the processing of health information, sanctions of up to 4% of worldwide gross revenue and extra-territoriality measures intended to bring non-EU companies under the proposed regulation. The new regulation comes into force in 2018.

***The failure to comply with our government contracts or applicable laws and regulations could result in, among other things, fines or other liabilities, and changes in procurement regulations could adversely impact our business, results of operations or cash flows.***

Revenues from our government customers are derived from sales to federal, state and local governmental departments and agencies through various contracts. Sales to public segment customers are highly regulated. Noncompliance with contract provisions, government procurement regulations or other applicable laws or regulations (including but not limited to the False Claims Act) could result in civil, criminal and administrative liability, including substantial monetary fines or damages, termination of government contracts or other public segment customer contracts, and suspension, debarment or ineligibility from doing business with the government and other customers in the public segment. In addition, generally contracts in the public segment are terminable at any time for convenience of the contracting agency or upon default. The effect of any of these possible actions by any governmental department or agency could adversely affect our business, results of operations or cash flows. In addition, the adoption of new or modified procurement regulations and other requirements may increase our compliance costs and reduce our gross margins, which could have a negative effect on our business, results of operations or cash flows.

***Liability claims brought against us could result in payment of substantial damages, costs and liabilities and decrease our profitability.***

*Client Claims*

If we breach the terms of an agreement with a client (for example if we fail to comply with the agreement, all applicable regulations or Good Clinical Practice) this could result in claims against us for substantial damages which could have a material adverse effect on our business. As we are a “people business” in that we provide staff to provide our services in hospitals and other sites, there is a risk that our management, quality and control structures fail to quickly detect should one or more employees or contractors fail to comply with all applicable regulations and Good Clinical Practice and thereby expose us to the risk of claims by clients.

*Claims relating to Investigators*

We contract with physicians who serve as investigators in conducting clinical trials to test new drugs on their patients. This testing creates the risk of liability for personal injury to or death of the patients. Although investigators are generally required by law to maintain their own liability insurance, we could be named in lawsuits and incur expenses arising from any professional malpractice or other actions against the investigators with whom we contract.

*Indemnification from Clients*

Indemnifications provided by our clients against the risk of liability for personal injury to or death of the patients arising from the study drug vary from client to client and from trial to trial and may not be sufficient in scope or amount or the client may not have the financial ability to fulfill their indemnification obligations. Furthermore, we would be liable for our own negligence and negligence of our employees and such negligence could lead to litigation from clients or action or enforcement by regulatory authorities.

*Insurance*

We maintain what we believe is an appropriate level of worldwide Professional Liability/Error and Omissions Insurance. We may in the future be unable to maintain or continue our current insurance coverage on the same or similar terms. If we are liable for a claim or settlement that is beyond the level of insurance coverage, we may be responsible for paying all or part of any award or settlement amount. Also, the insurance policies contain exclusions which mean that the policy will not respond or provide cover in certain circumstances.

*Claims to Date*

To date, we have not been subject to any liability claims that are expected to have a material effect on our business; however, there can be no assurance that we will not become subject to such claims in the future or that such claims will not have a material effect on our business.

## Risks Related to Our Indebtedness

***We have incurred debt, which could impair our flexibility and access to capital and adversely affect our financial position.***

As of 31 December 2016, we had an outstanding principal amount of indebtedness of $350 million under our $350 million Note Purchase and Guarantee Agreement or 'Senior Notes' that we entered into on 15 December 2015. We also have up to $100 million of additional borrowing capacity available under the Revolving Credit Facility. No amounts were drawn under the Revolving Credit Facility facility as of 31 December 2016.

The cost and availability of credit are subject to changes in the global or regional economic environment. If conditions in the major credit markets deteriorate our ability to obtain debt financing on favourable terms may be negatively affected.

We may incur additional debt in the future. Our debt could have significant adverse consequences, including to;

- limit our ability to borrow additional funds for working capital, capital expenditures, acquisitions or other general business purposes;
- limit our ability to use our cash flow or obtain additional financing for future working capital, capital expenditures, acquisitions or other general business purposes;
- require us to use all or a portion of our cash flow from operations to make debt service payments;
- require us to sell certain assets;
- restrict us from making strategic investments, including acquisitions or cause us to make non-strategic divestitures;
- place us at a competitive disadvantage compared to our competitors that have less debt;
- cause us to incur substantial fees from time to time in connection with debt amendments or refinancing;
- limit our flexibility to plan for, or react to, changes in our business and industry; and
- increase our vulnerability to the impact of adverse economic and industry conditions.

Our ability to meet our debt service obligations will depend on our future performance, which will be subject to financial, business and other factors affecting our operations, many of which are beyond our control. If we do not have sufficient funds to meet our debt service obligations, we may be required to refinance or restructure all or part of our existing debt, sell assets, borrow more money or sell securities, none of which we can be assured that we would be able to do in a timely manner, or at all.

In addition, a failure to comply with the covenants under our indebtedness could result in an event of default under such indebtedness. In the event of an acceleration of amounts due under our existing indebtedness as a result of an event of default, we may not have sufficient funds or may be unable to arrange for additional financing to repay our indebtedness or to make any required accelerated payments.

In addition, we are required, under the terms of the Senior Notes, to offer to purchase all of the outstanding Senior Notes if we experience a change of control. Similar requirements exist in the Revolving Credit Facility. These provisions may delay or prevent a change in control that our stockholders may consider desirable.

***Covenants in our credit agreements may restrict our business and operations and our financial condition and results of operations could be adversely affected if we do not comply with those covenants.***

The Senior Notes and the Revolving Credit Facility credit agreements include certain customary covenants that limit our ability other things, subject to certain exceptions;

- incur or assume liens or additional debt;

- dispose of assets;
- engage in mergers or reorganisations or;
- enter into certain types of transactions with affiliates.

The Senior Notes agreement also includes certain financial covenants that require us to comply with a consolidated leverage ratio, a minimum EBIT to consolidated net interest charge ratio and a maximum amount of priority debt, each of which are defined in the Note Purchase and Guarantee Agreement. Our ability to comply with these financial covenants may be affected by events beyond our control.

These covenants may limit our operating and financial flexibility and limit our ability to respond to changes in our business or competitive activities.

In the event that we fail to pay principal or interest when due on the Senior Notes, or as a result of a material breach of any representation, warranty or covenant or any other event of default then all outstanding amounts could become immediately due and payable. If, in such a circumstance, any of the holders of the Senior Notes, accelerate the repayment of such indebtedness, there can be no assurance that we will have sufficient assets to repay our indebtedness.

***Interest rate fluctuations may materially adversely affect our results of operations and financial condition in the event that the Company draws down on the Revolving Credit Facility or in respect of any future issuances of debt.***

The interest rate in respect of the Senior Notes is fixed at 3.64% for the five year term of the agreement. The Revolving Credit Facility bears interest at LIBOR plus a margin. There were no amounts drawn on the Revolving Credit Facility at 31 December 2016. The Company is therefore subject to interest rate volatility in respect of any future draw down on the Revolving Credit Facility or in respect of any future issuances of debt.

## Risk Related to Our Common Stock

***Volatility in the market price of our common stock could lead to losses by investors.***

The market price of our common stock has experienced volatility in the past and may experience volatility in the future which could lead to losses for investors. Factors impacting volatility in the market price of our common stock include, amongst others:

- our results of operations;
- issuance of new or changed securities analysts' reports or recommendations;
- developments impacting the industry or our competitors and general market and economic conditions;
- introduction of new products or services by us or our competitors;
- the public's reaction to our press releases, our other public announcements and our filings with the SEC;
- guidance, if any, that we provide to the public, any changes in this guidance or failure to meet this guidance;
- changes in the credit ratings of our debt;
- sales, or anticipated sales, of large blocks of our stock;
- additions or departures of key personnel;
- regulatory or political developments;

- litigation and governmental investigations;
- changing economic conditions; and
- exchange rate fluctuations.

In addition, stock markets have from time to time experienced significant price and volume fluctuations unrelated to the operating performance of particular companies. Future fluctuations in stock markets may lead to volatility in the market price of our common stock which could lead to losses by investors.

**Corporate Headquarters**

South County Business Park
Leopardstown
Dublin 18, Ireland

Tel: +353 (1) 291 2000
Fax: +353 (1) 291 2700

**ICONplc.com**

**About ICON**

ICON plc is a global provider of outsourced development solutions and services to the pharmaceutical, biotechnology and medical device industries. The company specialises in the strategic development, management and analysis of programmes that support clinical development. Further information is available at ICONplc.com.

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