Annual Report and Accounts 2017

NATIONAL NUCLEAR LABORATORY

National Nuclear Laboratory Limited

Country of Incorporation
England and Wales

Legal Form
Limited Company

Directors

Sir Andrew Mathews KCB FREng	Chairman
Paul Howarth FREng	Chief Executive Officer
Jilly Atherton	Chief HR Officer
David Beacham	Chief Customer Officer
Ruth Dunphy	Chief Financial Officer
Andrew Sherry FREng	Chief Scientist
Claire Flint*	Non Executive Director
Iain Lanaghan	Non Executive Director
Jonathan Walker	Non Executive Director
Mike Weightman CB FREng	Non Executive Director

Secretary and Registered Office
David Dukes,
Chadwick House, Birchwood Park, Warrington, Cheshire, WA3 6AE

Company Number
3857752

Independent Auditor
BDO LLP
3 Hardman Street, Spinningfields, Manchester, M3 3AT

* Appointed 24 April 2017

Contents

NNL at a glance

A WORKFORCE
OF AROUND
940

Zero
lost time accidents

CUSTOMER SATISFACTION
92%

Turnover of
£102m

50

peer-reviewed publications

Investment in R&D, including customer gearing, was

£11.2m

– more than ever before

Record earnings to reinvest of

£13.9m

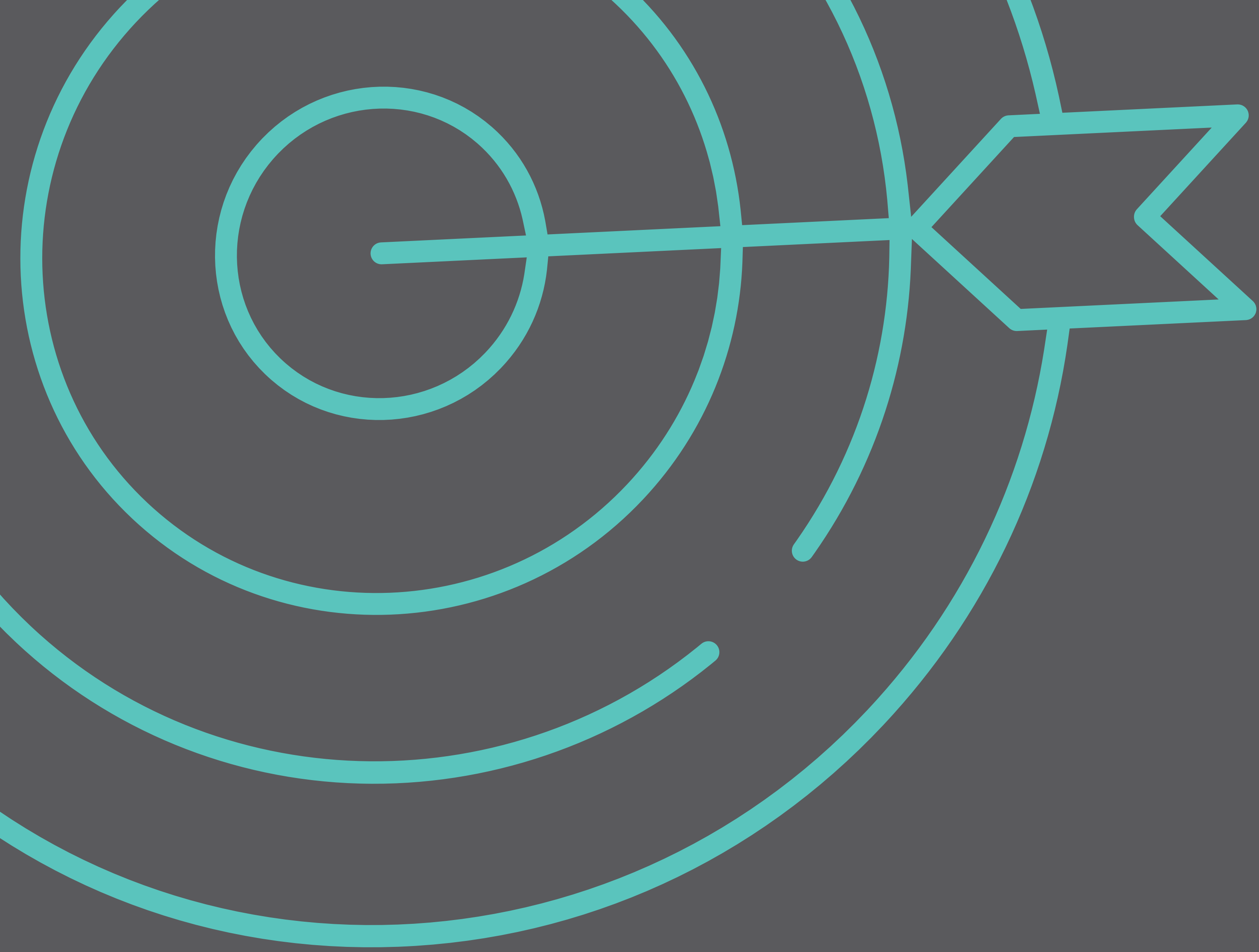
Estimated value added for our customers of at least

£500m

We manage

£1.5 billion

worth of unique nuclear facilities



STRATEGIC REPORT 1.1

Purpose

National Nuclear Laboratory's (NNL) financial statements include a strategic report that sets out the business's vision and objectives as well as highlighting various aspects of our progress and performance during the financial year 2016/17.

The Directors have prepared this report to meet the requirements of Section 414 of the Companies Act 2006. NNL's independent auditor is required by law to report on whether the information given in this strategic report has been prepared in accordance with applicable legal requirements and is consistent with the financial statements. The auditor's report is included later in this document.

Introduction from the Chairman

Thank you for choosing to read NNL's Annual Report for the 2016/17 financial year. No company can afford to stand still, so like many organisations we are on a journey. For us a major part of the transformation is about developing closer and more collaborative relationships across our customer base, ensuring that our business model enables us to operate commercially whilst driving innovation through translational R&D, and developing a more strategic relationship with Government. You will hear more about where we are heading later, but with any journey it's important to be setting out from the right place and I'm pleased to say that I'm able to reflect on a very good year for NNL in 2016/17.

We exceeded our Earnings to Reinvest[1] (ETR) target by over 10% without any lost time accidents or significant security incidents. Our commercial work is the cornerstone of our purpose, namely supporting the UK's critical nuclear missions in relation to power generation, legacy clean-up and maintaining an effective nuclear submarine deterrent. We made a number of highly significant contributions to our customers' businesses – and you will read more about the details of those throughout this report. Overall, we estimate that the value we added for our customer base during the year was many times the size of our turnover.

We began the year facing some uncertainty in our business. We have seen a lot of positive developments during the year and the business is now recruiting to revitalise ourselves for the challenges ahead. We ended the year in a stronger position than we started – but obviously with significant change still to come and a major Business Transformation Programme underway.

We know that our current customer base is going to undergo substantial change over the coming decade which, without firm action on our part, would lead to a fall in ETR. NNL is proactively responding to that through our Business Transformation Programme. That programme will make sure that we have both the

flexibility and the ability to think creatively, which will allow us to seek new areas of work from both existing customers and new ones, in the UK and overseas, and to use our R&D capability to launch products and ideas.

Part of our transformation is about becoming closer to our key customers. Our relationship with Sellafield Limited (SL) is fundamental to our business and, to this end, we signed a Technical Services Strategic Partnership Agreement with SL late in 2016, committing the two organisations to work together more closely in the national interest. One early example of that thinking is that Central Laboratory has been identified as the preferred option to house a Replacement Analytical Services Programme for SL, helping to optimise facility utilisation and further improve our joint working. We have also moved to work in long-term partnering arrangements with other key customers including Rolls Royce and EDF Energy.

In parallel, we are moving to a more strategic relationship with Government and in particular, the new Department for Business, Energy and Industrial Strategy, where we are truly recognised as the UK's National Laboratory for nuclear fission. There is increasing recognition in Whitehall that NNL can provide a more comprehensive and strategic advisory and foresight service to Government than we have done previously. The House of Lords Science and Technology Select Committee recently concluded an inquiry which looked at our role and remit, with the same thinking in mind, and we welcome their findings – including a recommendation of core funding to ensure a role for NNL in providing an advisory function to Government.

In light of all this, we recruited David Beacham into NNL to a new Board-level post of Chief Customer Officer to manage our evolving customer relationships. We also welcomed Rob Sneddon, who took up a new role as Business Programme Management Officer, leading the transformation activity.

I hope you enjoy reading the remainder of this report to learn more about the excellent work that is being done all across NNL and the different ways we are adding value to our customers and other stakeholders.

1. "Earnings to Reinvest" is operating profit after exceptional costs (including business transformation) but before science and technology expenditure, interest and tax.

STRATEGIC REPORT 1.3

Chief Executive's Overview

Andrew has set out the context for our current business performance and the transformation we are embarking upon. I would like to look a little more at the detail of our success this year, but the most important aspect of the year was our excellent safety performance. I'm pleased to report that we once again went through the year without a lost time accident; we were once again "Commended" by RoSPA at their awards event and were awarded the President's Award for 2016/17. We do not take safety lightly – it is the most important issue permeating our business – and it is pleasing to see that we are recognised for our efforts. I am particularly keen to further build on this position. Maintaining high quality safety management, embedded in our people, is essential for a high-performing company like ours.

Operationally, we have seen strong performance this year. Whilst there have been some early signs of challenges in the market (for instance some reductions in the scale of our business from the NDA estate), these have been anticipated and offset by positive signs elsewhere, such as a welcome growth in our work for the Ministry of Defence relating to support to the UK's nuclear submarine fleet. In the longer-term, the changes we are making through our Business Transformation Programme will position us strongly for the future.

"We do not take safety lightly – it is the most important issue permeating our business – and it is pleasing to see that we are recognised for our efforts."

Throughout the year, we have seen a steady series of customer successes, where we have been able to add substantial value to our customers' businesses through our work for them. Some specific highlights have included:

- Our work for SL has seen a number of major successes, which are described more fully in Section 1.4. A particular milestone was the signing of a long-term collaboration agreement with SL, aiming to work together in the national interest to reduce timescales and costs of delivering the site's clean-up mission.
- We have delivered record volumes of fuel and graphite post-irradiation work for EDF Energy, helping to keep the UK's fleet of Advanced Gas Cooled Reactor stations operating well, safely delivering low-carbon electricity to homes and businesses.
- Our work in international markets is positioning us well for the future by strengthening relationships – we lead the UK-China Joint Research and Innovation Centre (JRIC) on behalf of the UK nuclear sector, and we have strengthened our business links with other key markets such as Japan, the US and the EU. We remain actively engaged in both the operating Halden Reactor Project and the planned Jules Horowitz Reactor.

It is encouraging that we have seen the first real funding from the £250m national nuclear R&D programme announced by Government in 2015 flowing into the industry, with a portion coming to NNL. The programme covers future fuels, 21st century manufacturing, reactor design and recycling technology, as well as cross-cutting areas. Much of our own self-funded research work dovetails with this programme. For instance, we have seen great progress this year in our fuel R&D – including production of uranium silicide fuel pellets which could ultimately help the industry to have fuel which is more robust to accident conditions. We have also made good progress in commercialising some of our own technology developments, or those developed in partnership – such as the Brokk robotic simulator and the NiV separator to separate radionuclides more safely and efficiently.

A particular highlight this year has been excellent progress across our suite of world-leading nuclear facilities. We recognise that continued investment in facilities is vital – and we are committed to this. Our alpha-facilities in Central Laboratory are operational, and we have seen significant progress with the commissioning of our heavily-shielded hot cells in the same building. Our Windscale Laboratory caves have benefited from significant and successful refurbishment. We are seeing good progress towards new facilities (for instance in the area of robotics), and we have seen tremendous progress in terms of opening up our facilities for third-party access. In 2016/17 we hosted 47 academics from 13 different institutes, compared with just five academics the previous year.

"I want to thank all of those who have played a part in our success this year."

As we rebalance our skills mix and revitalise the business to face the future, we are seeing a welcome increase in recruitment of exceptional new talent to NNL at all levels. In 2016/17 we saw around 120 new people join our organisation which, after allowing for those staff who left the business, took the total size of our workforce to around 940 at the end of the year.

I want to thank all of those who have played a part in our success this year. That includes our customers, suppliers, academic partners, Government and others, with a particular thanks to all of our workforce for their continued dedication and hard work.

With our business transformation underway, continued successful delivery to our customers, an active programme of recruitment, real progress across the facilities portfolio and the prospect of a more strategic and mutually fruitful relationship with Government, there is a real buzz about NNL as we continue our journey. I hope you enjoy reading more in the rest of this report.

STRATEGIC REPORT 1.4

Business Review

NNL is the UK's principal nuclear research and development organisation, providing the technical knowledge and capability to ensure that the country's civil nuclear fission energy programmes are delivered safely and cost-effectively. We occupy a unique position in the nuclear innovation environment (spanning Technology Readiness Levels 3-6, taking science from inactive laboratory-scale demonstration to prototype deployment with real nuclear materials).

NNL is owned by the UK Government's Department of Business, Energy and Industrial Strategy (BEIS).

We are the custodians of unique world-leading nuclear skills, facilities and equipment vital to the UK.

With a broad span of knowledge and capability, we act independently and authoritatively when advising Government and stakeholders in the UK and worldwide. Many of our employees are internationally recognised experts in their fields, and we also work with Universities to enable academic access to our services.

We operate as a commercially funded national laboratory providing R&D leadership to national programmes. Our unique operating model yields earnings that we reinvest on behalf of the UK in research, skills and facilities.

The significant value added by our activities is recognised by customers and stakeholders, and exceeds the scale of our annual revenue many times over.

The combination of being a national laboratory that underpins a civil nuclear fission energy programme, while also operating commercially to reinvest in our capabilities, makes NNL unique around the world.

Here is an overview of what we do:

- Provide R&D and technical services to underpin safe and cost effective delivery of the UK's national programmes
- Provide strategic technical advice to UK Government, industry and stakeholders that is trusted, independent and authoritative
- Act as responsible custodian of unique capabilities that are essential for providing through life support to the fission fuel cycle and associated waste management challenges
- Act as a competent nuclear operator responsible for safe operation of state of the art, high active, industrial scale nuclear facilities
- Provide industry and academia with access to unique nuclear capabilities that can transform innovative ideas from science into industrial solutions

Safety is our number one priority at all times.

Customers

We provide technical support and services to customers all across most of the nuclear fuel cycle – from fuel and reactor analysis through post-irradiation examination of fuel and reactor materials, to waste management, clean-up and decommissioning support. We also offer support in other cross-cutting areas such as mathematical modelling and safety, security and safeguards services. Our customer base is increasingly international and we work across several continents, including Europe, Asia and North America.

Our major customers are:

Sellafield Limited

Sellafield Limited (SL) is our biggest single customer, accounting for over one third of our total turnover. With this in mind, we this year signed a long-term collaboration agreement with SL, aiming to work together more strategically and collaboratively in the national interest to reduce timescales and costs of delivering the site's clean up mission. Other highlights of our work for SL this year included:

- Our five year, £32m development programme to develop the waste handling, treatment and encapsulation technology in support of SL's Box Encapsulation Plant is nearing completion, with the technology transitioning to pre-commissioning
- We successfully completed (under budget) the Pile Fuel Storage Pond enriched materials retrieval and repackaging project – a four year programme which saw NNL receive 39 flasks of 1970s-era fuel to be repackaged, reducing one of the key risks on the site
- Work by NNL has underpinned the continuing operation of Highly Active Evaporator C, to support reprocessing operations on site, while preparations are made to bring Evaporator D into service. Related work has involved commissioning support to Evaporator D and lifetime assessment work for the Highly Active Storage Tanks.

EDF Energy

EDF Energy operates all of the UK's civil nuclear reactor fleet, comprising of seven Advanced Gas-Cooled Reactors plus one Pressurised Water Reactor (Sizewell B). Our work for EDF Energy includes post-irradiation examination (PIE) of fuel, components and graphite to support continued operation, enhance reactor performance, and – at the appropriate time – support the case for potential lifetime extension. During 2016/17 we delivered record volumes of fuel and graphite PIE work for EDF Energy. We also signed a Lifetime Enterprise Agreement – signifying a more collaborative working relationship and the intention for NNL to provide a broader range of services.

Rolls Royce / Ministry of Defence

In the same way that we provide PIE services to operating civil reactors, helping to keep the UK's nuclear energy generation fleet running, we provide a similar service to the Ministry of Defence in respect of the nuclear reactors which power the UK's submarine fleet. This contract is managed via Rolls Royce and again, we have taken steps this year to move to a more collaborative and strategic way of working.

Others

In addition to these key customers, we also provide services to most UK nuclear operators including Westinghouse, Urenco, Magnox Sites and Dounreay as well as the Nuclear Decommissioning Authority and sometimes Government directly (when we undertake specific projects for Government). Globally, we have customers in the USA, Japan, Europe and China and we work with overseas governments and utilities as well as other national laboratories.

Capabilities

Subject Matter Experts

NNL is the custodian of much of the UK's expertise and experience in nuclear fission technology. We have a great many of the UK's Subject Matter Experts – the national and international leaders in their specialist fields – many of whom have decades of experience.

Collectively, their subject areas cover much of the nuclear fuel cycle and in many cases their experience comes from time spent on operational nuclear plants, often coupled with working in - or with - academia.

Facilities

NNL operates a number of nuclear facilities. The flagship facility is our Central Laboratory at the Sellafield site, which is unique in the UK in having both non-active and active laboratories and a rig hall. Other facilities include:

- The Windscale Laboratory (active handling and inspection)
- The Preston Laboratory (uranium research)
- The Workington Laboratory (non-radioactive test rig services)

We also have office-based facilities at Warrington, Stonehouse and Culham.

Science & Technology

As would be expected in a national laboratory, scientific and technical capability runs through all aspects of our business. This encompasses our people, our facilities, our equipment, our collaborative "living network" and our programmes of self-directed R&D.

As we implement our new science and technology strategy we are focusing on innovative work which will deliver impactful science, technology and engineering, whilst encouraging greater collaboration with the best in the world – including opening up our facilities to others.

Strategic Objectives

Our five strategic objectives – and how we will achieve them – are as follows:

Provide strategic technical advice to Government and stakeholders

We will advise on the direction and execution of the emerging national programmes of nuclear R&D, and also provide R&D to these programmes where appropriate.

Innovate through science, technology and engineering

We will optimise the things that impact our science and technology the most – our culture, skills, facilities, programmes of work and reputation. We developed and published a new Science and Technology Strategy in 2015/16 to support this objective, and we have made good progress on implementing the strategy during 2016/17. As a practical nuclear business, working with a wide range of nuclear materials, our own R&D programme creates unique opportunities for innovation.

Sustain business through operational excellence

We will ensure that we are commercially successful in order to generate the surpluses required to deliver all of our strategic objectives.

Employ outstanding people

We will attract, develop and retain the best people for our business and industry, and will invest in our facilities.

Our people are our biggest asset and differentiator. We aspire to employ the best people in the industry, using our unique position at the heart of nuclear science and technology as a thoroughfare for talent. We aim to differentiate ourselves by making the working environment highly engaging for all our people, during every stage of their working life at NNL.

Lead the way in operational EHSS&Q

We will focus on leading indicators of both human performance and behavioural observations across the business. These will continue to drive local ownership and accountability for Environment, Health, Safety, Security and Quality (EHSS&Q) in every part of the business.

A strategic review of the business is underway, which has led to a refinement of these strategic objectives. Further information can be found on our website: www.nnl.co.uk

STRATEGIC REPORT 1.4.4

Business Performance

Overall, NNL's business is doing well. The organisation remains a successful commercial operation, recognised and respected by the UK Government, customers and others. We continue to anticipate significant transformational opportunities as the nuclear industry evolves. As our customer needs change, NNL will adapt to meet new requirements with existing and new customers. However, we recognise that any new work, such as the role we play as a strategic technical advisor to the UK Government on nuclear matters, must continue to be based firmly on the foundation of a strong portfolio of commercial work. As we have once again delivered increased profit before tax, interest and exceptional costs (£11.5m, up from £10.0m in 2015/16) and turnover has remained steady (£101.8m, similar to the 2015/16 figure of £101.3m) during a time of some change and uncertainty in the industry, we are in a strong position to move forward successfully.

As we implement our new science and technology strategy we are aggressively driving innovation in national and international nuclear programmes while maintaining strategic nuclear capability, developing outstanding people of reputation and influence, and operating leading-edge facilities that enable national and international R&D collaborations. A good example of this is the work we have done with Kurion to successfully demonstrate the application of their Geomelt technology to real nuclear materials in our Central Laboratory. On the fuels side, our work on Accident Tolerant Fuels has delivered major milestones in the manufacture of uranium silicide fuel pellets.

We are also boosting the impact which we have on the national and international stage – and in 2016 we saw a record number of NNL papers published in peer-reviewed scientific journals. We reinvest around £2-3m annually in our own self-funded R&D programme, which also helps secure participation in wider research programmes worth around £25m.

In terms of our relationships with Government, we see signs of a more strategic relationship, as evidenced by the recent House of Lords inquiry and ongoing discussions with BEIS officials. Coupled with that, we remain increasingly central to the UK's overall nuclear landscape, holding leadership roles in organisations such as the Centre of Nuclear Excellence and the Nuclear Skills Strategy Group. The new industrial strategy and nuclear sector deal appear to offer a great opportunity for the nuclear sector as a whole, and for NNL in particular.

However, we cannot become complacent on the back of the success of this past year. We have undertaken significant reviews across the business over the past two years and introduced a major programme of Business Transformation to position ourselves better for the long-term future.

STRATEGIC REPORT 1.4.5

Key Performance Indicators

	2015/16 Actuals	2016/17 Target	2016/17 Actuals
Environment and Energy	Cat 1-4 Events: 0	Cat 1-4 Events: 0	0
Health and Safety	Sig Events: 0	Sig Events: <3	1
Security	2 (5 Cat 4 or above)	Reportable events: <6	0
Quality	0	Cat 4 Issues: <3	0
Culture/Assurance	1	Actions outstanding: <9	1
Revenues	£101.3m	£104.8m	£101.8m
Earnings to Reinvest (ETR)	£7.4m	£12.4m	£13.9m

FINANCIAL REVIEW 1.5.1

Statement of Comprehensive Income

TURNOVER OF £101.8 MILLION

PROFIT FROM OPPERATIONS £11.5M

Despite an exceptionally difficult market and the ongoing refurbishment of Windscale Laboratory overall, 2016/17 was a successful year.

Turnover of £101.8m and profit from operations before exceptional items of £11.5m both increased from 2015/16 levels. NNL has continued to win new work in increasingly competitive markets and has successfully balanced delivering value to both its customers and owner.

Total revenue has increased £0.5m from 2016 levels, although relatively modest the increase represents significant success in a market which has seen the core decommissioning business decline. Operating costs decreased £1.0m from 2015/16 levels. Whilst delivery costs fell by £2.5m due to efficiency improvements investment in science and technology increased by £1.5m.

An exceptional cost of £2.6m has been recognised in the year, this represents the cost of an ongoing Business Transformation Programme. The programme, which could last a further three years, includes investments in infrastructure, business structure, people, systems and processes and will allow NNL to remain agile and responsive and at the leading edge of the nuclear industry. Specifically the costs incurred in the current year relate to establishing programme scope and setting up the transformation programme management teams.

Net financing income has increased over the last year as a result of interest accruing during the year on the long term debt associated with the phase 2 commissioning project.

Earnings before tax of £9.1m are significantly higher than last year which was affected by the costs of a restructuring programme.

The statement of comprehensive income is set out on page 33 and shows the profit for the period.

	2017 £m	2016 £m	Change £m
Revenue	101.8	101.3	0.5
Profit from operations before exceptional items	11.5	10.0	1.5
Exceptional item – restructuring costs	(2.6)	(6.2)	3.6
Net financing income	**0.2**	**0.1**	**0.1**
Profit before tax	9.1	3.9	5.2

Statement of Financial Position

The end of the year sees a further strengthened balance sheet position and a healthy cash balance.

Non-Current Assets

NNL continues to invest in its long-term future and we invested £8.1m in property, plant and equipment in the year. The principal investments were:

- Enhancements to the Windscale Laboratory **£3.9m**
- Enhancements to the Central Laboratory capabilities **£0.7m**
- Enhancements to laboratory equipment **£1.8m**

The enhancements to the Windscale Laboratory were partially funded by a grant from the NDA.

Intangible assets are comprised mainly of a £3.8m service concession asset. This is the value attributable to NNL's right to use capacity in the High Alpha Labs of the Central Laboratory, which is being commissioned primarily for Sellafield Limited's (SL) use. The amount is expected to be recovered from future work to be undertaken for third parties – a healthy orderbook and pipeline more than support the carrying value of the asset.

There has been a significant reduction in trade and other receivable as SL opted to pay off the phase 2 commissioning debt in April 2017 rather than over six years as contracted previously. At 31 March 2016 an amount of £17.5m of the £17.9m total relates to the commissioning debt, at 31 March 2017 the full amount of the debt is included in current assets, having been invoiced at the year end.

Current Assets

Trade receivables have increased by £19.1m largely as a result of the reduction in the long term debtor mentioned above. Prepayments and accrued income have decreased by £5.7m since 2016 - the balance last year was distorted by one individual project which amounted to £6.8m of the accrued income balance.

Cash at bank at 31 March stood at £15.8m, an increase of £5.4m reflecting increasing cash from operations.

Non-Current Liabilities

Trade and other payables of £31.9m represent capital grants received and receivable in respect of the investment programmes. The balance has decreased by £2.5m since last year further grants received for capital works in our Windscale and Preston facilities have been offset by repayment of the £4.0m loan to NNL (Holdings) Ltd.

Current Liabilities

Payments received on account have decreased by £1.8m mainly due to work progressing against agreed scope. Taxation creditors have increased significantly – largely as a result of VAT due on the invoicing of the long term SL debtor mentioned earlier. Accruals and deferred income have decreased by £1.5m but this is partially offset by an increase in trade payables of £1.0m.

Treasury Management

Cash sums that are surplus to immediate requirements are deposited in an interest bearing account at the Royal Bank of Scotland.

NNL does not have significant foreign currency transactions. Foreign exchange gains and losses are accounted for as they are incurred.

Credit Risk

NNL is exposed to credit risk from its trade receivables due from customers and cash deposits with financial institutions. The financial position of NNL customers are assessed at the time credit terms are applied for and on a continuing basis. Provision is made for any debts which are considered to be doubtful. At the year end, we do not consider there to be any material unprovided doubtful debt.

Cash Flow Risk

NNL monitors cash flow risk by maintaining and monitoring cash flow forecasts and ensuring that adequate unutilised borrowing facilities are maintained.

Supplier Payments

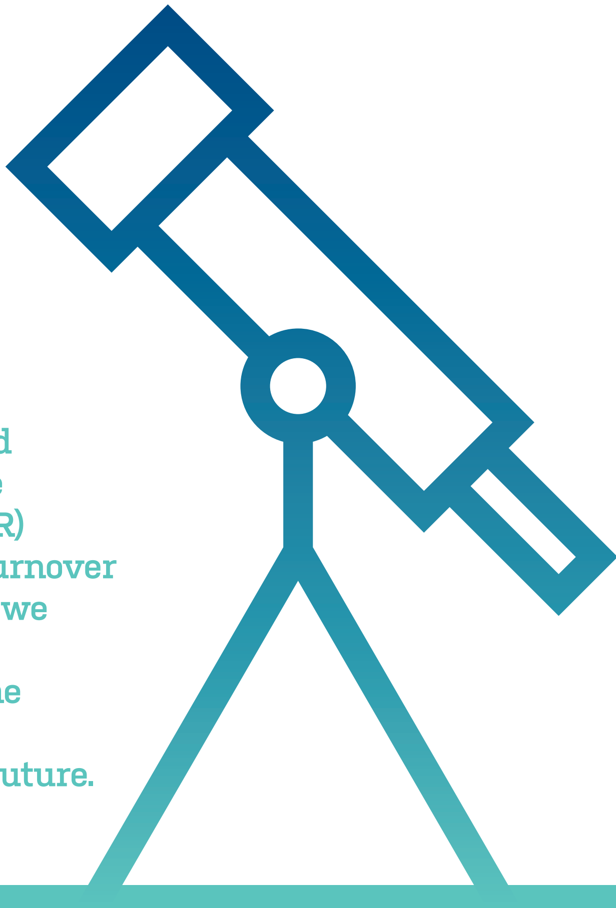
NNL follows the Prompt Payers Code of Practice drawn up by the Confederation of British Industry (CBI). This policy requires NNL to agree the terms of payment with its suppliers, to ensure that those suppliers are aware of those terms and to abide by them. Copies of the code are available from CBI, Centre Point, 103 New Oxford Street, London WC1A 1DU. NNL's main payment terms are net monthly.

Significant Events After the Reporting Period

There have been no significant events after the reporting period that require disclosure.

STRATEGIC REPORT 1.6

Future Outlook



NNL is currently in a strong position and positioned well for the years to come. We have grown our earnings to reinvest (ETR) during the past year, based on a stable turnover from a diversified customer base. Whilst we recognise that our extensive Business Transformation Programme may see some reduction in ETR in the near term, we anticipate further steady growth in the future.

Budgetary pressure for Government funded customers particularly in the light of recent general election and EU referendum results may mean that revenues from these customers may fall in the short term. However, we expect to see these levels recover in the medium term. We also expect that any impact on overall revenue will be offset by growth arising from a number of different sources, including:

- New contracts with Generation and Defence customers
- New work in our newly operational alpha-facilities in Central Laboratory
- The enhanced capability of our suite of world-class research laboratories, as our Windscale Laboratory returns to full availability and remaining areas of Central Laboratory currently under commissioning are brought into full use
- Funding from the UK Government's national nuclear research programme which has now started and which is expected to grow
- NNL's increased presence in the international nuclear arena, particularly in countries such as the US, France, Japan and China

As we prepare for the future, we are also critically reviewing all aspects of our business to ensure that we are prepared to face the challenges and capitalise on the opportunities that arise. Future changes will be delivered through a comprehensive, integrated business transformation programme to ensure that we remain suitably prepared to deliver effectively on our purpose and vision.

Risks and Uncertainties

The Directors are confident about the future of the business. Nonetheless, risks and uncertainties do exist which could adversely impact future financial performance. We redesigned our approach to risk and opportunity management in 2016/17 to improve its effectiveness. The principal areas of risk are set out in Section 1.5.2.

Going Concern

The company's business activities, together with factors likely to affect its future development, performance and position have all been considered. Any consideration of future matters involves making a judgement at a particular point in time, about future events which are inherently uncertain. However, at the time of approving these financial statements, the Directors believe that there is a reasonable expectation that the company has adequate resources to continue to adopt the going concern basis in preparing these financial statements.

Approval

This strategic report was approved by order of the Board.

David Dukes
Secretary

2.0 Environment, Health, Safety, Security and Quality (EHSS&Q)

EHSS&Q is central to absolutely everything we do. Although we are pleased with our achievements in 2016/17, there is no room for standing still. We are impatient to accelerate on our journey to world class, applying uncompromising standards and a desire to consistently do the right thing.

Performance

We have achieved a strong performance in our high level measures across all EHSS&Q and have maintained our open reporting culture, enabling improvement across all areas.

Highlights have been:

- No significant security incidents
- No days away cases and only one safety reportable event
- No notable customer quality events
- High level of environmental compliance

Improvement

We recognise that outcomes are important but that transformational improvement is what will lift NNL to world class. This is our ultimate destination and the journey will involve acceleration of safety, security and assurance improvements. We achieved 96% of our EHSS&Q improvement actions through the year and have increased local ownership of such improvements, something we want to accelerate still further.

Culture

Culture is core to our business and we are pleased that the increased numbers of behavioural observations we have seen this year (a record number) gives us a strong foundation to build upon. This is a combination of one-to-one safety conversations and also more in-depth interventions such as task observations. We need to constantly do the right thing and, in 2016/17, we have introduced a simple safety leadership tour methodology, started by the executive but now extending through the organisation – ensuring safety discussion and conversation is part of the everyday routine.

We know that our security culture needs constant attention and reinforcement: the focus in this area has been high, covering physical, information, cyber and personnel security.

Recognition

In 2016/17 recognition has come in several forms, including:

- Achieving the RoSPA Presidents Award
- Very positive performance in our external assessments; maintaining certification against our ISO standards – quality, environment, energy and information security
- Achieving high scores in the CIPS sustainability index and Achilles assessment system

The above recognition is pleasing and serves as motivation for our people in their everyday pursuit of great levels of EHSS&Q. However, constantly doing the right thing means there is no room for accepting how things are – and in 2017/18 we are setting really stretching and challenging targets across EHSS&Q as the next stage in our journey to brilliant EHSS&Q.

"We recognise that outcomes are important but that transformational improvement is what will lift NNL to world class. This is our ultimate destination and the journey will involve acceleration of safety, security and assurance improvements."

3.0 Our People and Communities

People are integral to our success - whether directly through our employees and their contribution or indirectly through the work we do with our local communities. This section describes some of the different ways we've engaged with them recently.

OUR PEOPLE AND COMMUNITIES 3.1

Our People

We encourage an environment of open communication and discussion, sharing regular business, team and individual updates through established online and face-to-face channels. In addition to this, our engagement approach takes into account a range of things including recognition, development, involvement, health, wellbeing and flexibility.

Our commitment to employee development and recognition is demonstrated in a variety of ways, including:

- We offer General Management, Technical Graduate and Apprentice programmes and a new intake is due for 2017/18
- We've designed a new interactive learning portal to help employees take responsibility for their personal development
- We're developing a behavioural framework, to support our recruitment, performance and development procedures
- In addition, almost a third of our employees were recognised locally for going above and beyond expectations

Involving our People

We involved around 70 leaders and managers in developing and sharing our plans to transform the business. We have been careful to ensure these plans address feedback previously put forward by around 250 employees in engagement workshops.

Health and Wellbeing

We take a holistic view of our employees' health and wellbeing. For example, as part of our 'GO' health and wellbeing programme, we ran a series of campaigns which included free summer and winter wellbeing packs. We also introduced free regular fruit baskets at each site.

In addition to these physical benefits, we also recognise the mental and emotional impact of activities such as discrimination, bullying, harassment and victimisation, which we will not tolerate as an employer. Our 'Dignity at Work' events raised awareness of these things and helped people to understand how to recognise and respond to them. Last year, two-thirds of our people attended.

We also provide a free 24-hour employee assistance programme, where employees and their families can access confidential support on a range of topics, from coping with difficult personal situations to managing finances.

Flexibility

We encourage flexible working, wherever practical across our business. This gives our people the flexibility to better balance their work and personal/family commitments. We also support part-time working, with just under 10% of our workforce on part-time hours.

Our flexible approach also allows people to take part in events that support their local communities, some of which are outlined in the next section.

Community Engagement

NNL continues to chair CoNE (the Centre of Nuclear Excellence) and is represented on the Board of Marketing, Cheshire. In addition, we maintain a strong programme of Corporate Social Responsibility (CSR) activity focused predominantly on supporting Science, Technology, Engineering and Maths (STEM) in and around the communities where our facilities are based and where our people live.

Some of the highlights of the year include:

- Sponsoring science festivals in Lancashire, Cheshire and Oxford
- Supporting STEM events including 'Engineer Your Future', 'Take AIM' and 'Big Bang'
- Providing donations to local charities from employee-led fundraising events
- Helping schools in different ways:
  - Smallpeice Trust residential events
  - Laboratory design (St Benedict's, Cumbria)
  - Career conventions and mock interview sessions
  - Scholarship funding (Arkwright)
  - Engineering Education Scheme
  - Structured work placements within NNL and other companies

During the year we funded over 2500 hours of our employees' time to support CSR activity, and we know that significant extra support was provided by our people in their own time.

NNL is also an active supporter of Women in Nuclear (WiN) UK. Part of their mission is to address the industry's gender balance, improving the representation of women in leadership. Of our employees, 27% are female, and many (both female and male) are members of WiN.

> **"We maintain a strong programme of Corporate Social Responsibility (CSR) activity focused predominantly on supporting Science, Technology, Engineering and Maths (STEM) in and around the communities where our facilities are based and where our people live."**

4.0 Our Directors

Sir Andrew Mathews, Chairman

Sir Andrew Mathews was appointed as the Chairman of NNL in 2016, having previously served as a Non-Executive Director for around 18 months.

He joined the Royal Navy in 1976, and held a variety of sea and shore-based roles during a Navy career spanning 38 years. As Commodore he commanded HM Naval Base Devonport; promoted to Vice Admiral in 2009 and appointed as Chief of Materiel Fleet, he managed the support and acquisition programme for all ships and submarines and was responsible for the operation of the Navy's three naval bases. With over 4,500 people and a budget of £5.4 billion per annum, the post included both Defence Equipment and Support Main Board and Navy Board membership and chairmanship of the DE&S Safety Board.

Sir Andrew was appointed CB in 2008 and knighted in 2013. He retired from the Royal Navy in 2014, and in addition to his NNL role he sits as an independent Non-Executive Chairman of the Board of Devonport Royal Dockyard Ltd, Non-Executive Director on the EDF Nuclear New Build Generation Company and Senior Defence Advisor to Atkins. He is a fellow of the Royal Academy of Engineering.

Paul Howarth, Chief Executive Officer

Paul was appointed as NNL's Managing Director in 2011, subsequently becoming Chief Executive. He has run large groups and extensive portfolios in both the academic and business environments and engaged with senior stakeholders across Government, academia and industry. He has a strong knowledge of the research affairs of national and international nuclear organisations.

Paul chairs the Centre of Nuclear Excellence which comprises the key nuclear delivery companies in Cumbria, working with public and private sector organisations to ensure the region can deliver Government energy, defence and economic policy objectives. He is a Non-Executive Director at the National Physical Laboratory and chairs the Science and Technology Advisory Committee for the UK National Measurement System. Paul co-founded the Dalton Nuclear Institute and has worked in Japan on the country's nuclear programme. He sits on various R&D Committees and on the Board of the Association for Innovation Research & Technology Organisations.

Paul gained his PhD under Culham's fusion programme working at the European Nuclear Fusion Laboratory (JET); he is a Fellow of the Institute of Physics and the Nuclear Institute and was elected to the Royal Academy of Engineering in 2014.

Jilly Atherton, Chief HR Officer

Jilly joined NNL as People Director in 2014, having worked internationally as a human resources professional for over 20 years across various industry sectors for FTSE 100 equivalent companies, including Trelleborg Offshore, British Airways and Halifax. Prior to this she was a civil servant working for the Employment Service and Inland Revenue (now part of Her Majesty's Revenue and Customs).

As member of the Chartered Institute of Personnel Development (CIPD), Jilly is an accomplished HR strategic partner working at Board and Executive levels on a global platform. During her earlier career she focused on HR specialisms including reward, engagement and industrial relations. Taking a break from HR, she ran a commercial programme office for a brief period to enhance her business knowledge and skills portfolio, which culminated in the sale of BA Connect to FlyBE in November 2006 and the set-up of BA CityFlyer.

David Beacham, Chief Customer Officer

David was appointed as NNL's first ever Chief Customer Officer in November 2016. He is a Chartered Engineer and Fellow of the Institution of Civil Engineers with over 25 years of professional experience on a wide range of complex engineering and construction projects including leadership of people, major projects and programmes, sales, commercial and business management.

In his role as Chief Customer Officer, David is responsible for full end-to-end delivery of NNL's operations whilst ensuring that delivering value to our customers is at the heart of the organisation; the role encompasses linking and driving the customer relationships, operational and delivery strategy and world class project delivery.

David has a proven track record of improving team performance and delivering challenging projects for customers. His nuclear experience includes working on major projects at Hinkley Point C, Sizewell C, Wylfa, Sellafield, Drigg, Devonport and Barrow. He also has extensive international experience ranging from Cuba to India and Taiwan to Romania.

Ruth Dunphy, Chief Financial Officer

Ruth joined NNL in 2015 as Chief Financial Officer. A member of the Chartered Institute of Management Accountants (CIMA) with over 15 years post-qualified experience, Ruth brings a breadth of experience across a variety of industry sectors and has worked for a number of large to mid-sized UK and international organisations with differing ownership structures. Over the past ten years, she has worked in engineering and construction companies specialising in the utility sectors.

Ruth's career before NNL includes roles at IMI Norgren, Airtours Holidays, Akzo Nobel and Alfred McAlpine. In 2008, Ruth joined Biwater Treatment, which was subsequently acquired by MWH in 2010, where she was part of the executive team responsible for double-digit revenues growth in the construction business, trebling its order book and overseeing diversification. In 2012, Ruth was promoted to UK Group Finance Director and went on to lead the rollout of the UK Shared Service Centre.

Throughout her career Ruth has specialised in areas including performance improvement, growth and diversification, business change and transformation including post-acquisition integration.

Andrew Sherry, Chief Scientist

Professor Andrew Sherry was appointed as NNL's Chief Scientist in January 2015, joining NNL from The University of Manchester where he was Director of the Dalton Nuclear Institute. Previously he was Director of the University's Materials Performance Centre, held a Royal Society Industry Fellowship, and was a Senior Consultant in the nuclear industry working within the field of materials and structural integrity.

Andrew led the establishment of the flagship Dalton Cumbrian Facility, a partnership with the Nuclear Decommissioning Authority (NDA) to create a centre of excellence in radiation science and engineering decommissioning research, and led the collaboration with Sheffield University to create the Nuclear Advanced Manufacturing Research Centre. He was also Programme Director for the £8 million New Nuclear Manufacturing research programme funded by the Engineering and Physical Sciences Research Council, the Universities of Manchester and Sheffield and Rolls-Royce.

Andrew has been a member of both the UK Nuclear Industry Council and the UK Nuclear Innovation Research Advisory Board. He provides independent advice on strategic and technical aspects of nuclear power and has advised international nuclear bodies including CEA, INL and the Korea Atomic Energy Research Institute.

Iain Lanaghan, Non-Executive Director

Iain Lanaghan joined NNL's Board as a Non-Executive Director and Chairman of the Audit Committee in 2014. He has over 30 years of experience as a Chief Financial Officer of both listed and private equity backed companies, and has specialised in growing, commercialising and financing international companies.

Iain is a Non-Executive Director of Defence Equipment and Support, a bespoke trading entity with the remit of equipping and supporting the UK's armed forces, and of Scottish Water. Iain is also founder and Non-Executive Chairman of Metropolitan European Transport - one of the largest independent bus operators in Germany - which has grown from a start-up in 2011 to turnover of over €30m. He is a Non-Executive Director and Chairman of the audit committee of Cabot Energy plc, and advises other companies, particularly in the energy sector.

Iain was Group Finance Director of FirstGroup plc and Faroe Petroleum plc. He prepared private equity backed Atlantic Power for IPO prior to a successful trade exit, and was Finance Director of PowerGen International, which grew from a start-up to $7bn of operated projects. He is a member of the Institute of Chartered Accountants of Scotland.

Jonathan Walker, Non-Executive Director

Jonathan is the Government's Non-Executive shareholder representative on the NNL Board. He joined UK Government Investments (formerly Shareholder Executive) in July 2013 as an Executive Director and has been involved in a number of roles there, including working with CDC, Land Registry, Royal Mail and on Student Loans monetisation.

Prior to joining the Shareholder Executive, Jonathan spent 16 years in Corporate Finance and Corporate Broking at JPMorgan Cazenove, Merrill Lynch and Oriel Securities, based in London. During his career Jonathan has advised on a broad range of UK and crossborder corporate broking, capital markets and M&A assignments, with a particular focus on the industrial, natural resources and support services sectors.

Mike Weightman, Non-Executive Director

Mike Weightman joined NNL's Board as a Non-Executive Director in 2014, following his retirement as HM Chief Inspector of Nuclear Installations and CEO of the Office for Nuclear Regulation (ONR). As part of his career as the Health and Safety Executive, Mike led the independent investigation into the Potters Bar rail disaster. He also prepared the nuclear regulator for new nuclear build and drove the ONR toward independent operation as a statutory corporation.

He is renowned internationally, having chaired the OECD Nuclear Energy Agency's Committee on Nuclear Regulatory Activities, been appointed to the IAEA's International Nuclear Safety Advisory Group, and led the IAEA's Fukushima fact finding mission to Japan in 2011. In addition to his role with NNL, Mike is an Independent Advisor to the Japanese Nuclear Regulation Authority and their Nuclear Decommissioning Strategic body for Fukushima, a visiting Professor at Cambridge University's Engineering Department, an Advisor to the Jordanian Government, a Consultant to the NEA and IAEA and an Independent Advisor to several engineering companies.

In 2013 he was made a Companion of the Order of the Bath for services to nuclear safety.

5.0 Governance Statement

The Governance Statement is intended to give a clear understanding of the dynamics of the business and its control structure. NNL is not required to comply with the provisions of the UK Corporate Governance Code ("The Code"), does not intend to fully comply with The Code and does not give a statement of compliance with The Code. However, this Governance Statement explains how NNL has complied with the principles of good governance and how it reviews the effectiveness of these arrangements.

GOVERNANCE STATEMENT 5.1

Governance Framework

(inc modern slavery statement and gender pay reporting)

The Department of Business, Energy and Industrial Strategy (BEIS) owns and sponsors the National Nuclear Laboratory Limited (NNL). BEIS manages its ownership of NNL through UK Government Investments Ltd (UKGI), who provide governance oversight, and a UKGI representative is a member of the NNL Board. NNL and BEIS (ex-DECC) signed a Memorandum of Understanding in June 2016 which outlines ways of working and the scope of the services, support and strategic advice that NNL delivers to the Government.

The Board has responsibility for maintaining a sound system of internal control that supports achievement of NNL's policies, aims and objectives, whilst safeguarding NNL's assets.

The Board of Directors supports high standards of governance and, in so far as is practicable given the business's size and status, has, together with UKGI, continued to develop the governance of the business in accordance with the UK Corporate Governance Code.

Specifically, NNL is committed to preventing modern slavery and human trafficking. NNL will not tolerate the abuse of men, women or children and strives for total transparency right through its business and supply chains.

Accountability is assigned to the NNL Chief Financial Officer with the Procurement Team undertaking day to day management. NNL's slavery and human trafficking statement for the financial year ending 31 March 2017 (made pursuant to section 54(1) of the Modern Slavery Act 2015) has been approved by the NNL Board and is published on the NNL website (www.nnl.co.uk).

Gender pay gap analysis is underway to enable reporting to commence during the coming year pursuant to the Equality Act 2010 (Gender Pay Gap Information) Regulations 2017.

GOVERNANCE STATEMENT 5.2

Board and its Committees

The Board of Directors currently comprises a Non-Executive Chairman, three further Non-Executive Directors and five Executive Directors (the Chief Executive, the Chief Financial Officer, the Chief Customer Officer, the Chief HR Officer and the Chief Scientist). The Board met nine times in 2016/17 (2015/16 - 6 times).

Attendance by members at the Board and Committee meetings are set out in the table below.

Name	Position	Board	Audit Committee	Remuneration Committee
Sir Andrew Mathews	Chairman	8/9	1/1	2
Paul Howarth	Chief Executive Officer	9		
Jilly Atherton	Chief HR Officer	9		
David Beacham	Chief Customer Officer	3/3		
Ruth Dunphy	Chief Financial Officer	7/9		
Andrew Sherry	Chief Scientist	8/9		
Claire Flint*	Non-Executive Director	0/0		0/0
Iain Lanaghan	Non-Executive Director	9	2	2
Jonathan Walker	Non-Executive Director	9	2	2
Mike Weightman	Non-Executive Director	8/9	2	2
Number of meetings		**9**	**2**	**2**

* Appointed 24 April 2017

The Role of the Board

The role of the Board is to provide leadership of NNL, within a framework of prudent and effective controls which enable risk to be assessed and managed. The Board sets NNL's strategic aims, ensures the financial and human resources are in place for NNL to meet its objectives and reviews management performance.

The Board sets NNL's values and standards and ensures that its obligations to its shareholders and others are understood and met.

The specific roles and responsibilities of the Board include:

- Approval of the annual strategy, five year plans and budget
- Oversight of the corporate risk register and internal control systems
- Oversight of business performance
- Approval of major contracts and capital expenditure
- Development of remuneration systems for Executive Directors, including performance related pay
- Approval of Senior Executive appointments or, where appropriate, recommendation of appointments to UKGI
- Performance appraisal of Executive Management plus succession planning
- Scrutiny of financial accounts through the Audit Committee of the Board

- Compliance with statutory requirements
- Annual evaluation of its performance and that of its committees
- Quality information is supplied to the Directors on a timely basis to enable them to discharge their duties effectively. All Directors have access to independent professional advice, at NNL's expense, if required
- The Board of Directors confirms that it considers the Annual Report and Accounts taken as a whole is fair, balanced and understandable and provides the information necessary to assess NNL's performance, business model and strategy

Board Review

An independent Board review conducted in 2016 drew strong, positive conclusions. Recommendations for improvement have been addressed.

Audit Committee

The Audit Committee is responsible for the independent assessment of NNL's control environment, financial risk management and effectiveness of corporate governance and for providing advice and challenge on financial risks that may impact the organisation.

The Audit Committee terms of reference were revised following the Board Review. It now comprises three independent Non-Executive Directors and is chaired by a Non-Executive Director, currently Iain Lanaghan. The Committee invites the Executive Directors and senior representatives of the external auditors to attend meetings as and when appropriate.

The Committee met twice in 2016/17 and will continue to meet at least twice each year in future.

Remuneration Committee

The Remuneration Committee is responsible for reviewing and recommending Executive Director salaries, performance related payments and taxable benefits. In order to attract, motivate and retain talented leaders to deliver the NNL strategy, it is also responsible for maintaining an overview of executive appointments and remuneration policy, and for overseeing major changes to employee benefit structures.

The Committee is made up of all Non-Executive Directors and is chaired by the Board Chairman. The Committee invites the Executive Directors to attend meetings as appropriate (other than when their own remuneration and/or terms and conditions of employment are under discussion).

The Committee met twice in 2016/17 and will continue to meet at least twice each year in future.

Technical Advisory Board

The Technical Advisory Board (TAB) is not a formal Board subcommittee but it was established in 2014/15 to provide advice to the NNL Board and Executive Leadership team on the impact of Science, Technology and Engineering in underpinning the NNL Strategic Plan and NNL's remit as defined in the Nuclear Industry Strategy.

The remit of the TAB is to ensure that self-invested National Programme Research and Development funds are invested in the best topic areas and that NNL's quality of science and engineering is of an appropriate standard for a national laboratory.

The TAB is chaired by a Non-Executive Director, currently Mike Weightman, and it includes representatives of strategic partners from academia, Government and industrial organisations. Representatives from other organisations are invited as appropriate, particularly overseas national laboratories.

Business Executive Team

The Chief Executive Officer has primary responsibility for the day-to-day management of the business and discharges his responsibilities through a Business Executive Team, whose membership is made up of the Executives leading the main functions of the business. The Business Executive Team meets formally on a regular basis and not fewer than 12 times a year.

The roles and responsibilities of the Business Executive Team include:

- Monitoring the effectiveness of all environmental protection, health and safety, security and quality aspects of NNL activities
- Overseeing the Key Performance Indicators (KPIs) that monitor overall progress against targets and ensuring corrective actions are taken
- Ensuring that NNL operates in line with guidance from the NNL Board
- Implementation of the strategic plan and efficient operation of the business
- Development and implementation of a long term strategy in conjunction with the Board
- Development of an annual business plan for approval by the Board
- Approval of all capital expenditure and major contracts not requiring Board approval
- Preparation of a risk register and subsequent reviews and mitigating actions
- Development of performance improvement programmes
- Establishment, maintenance and development of operating procedures
- Working with the Remuneration Committee to develop remuneration systems for staff, including performance related pay

GOVERNANCE STATEMENT 5.3

Risk Management

NNL's Directors remain confident about the future of the business. Nevertheless, risks and uncertainties do exist which could adversely impact future financial performance. The approach to risk and opportunity management was further enhanced in 2016/17 to improve the effectiveness of the approach and the performance of the business.

Our approach has the twin aims of driving the business to achieve its Strategic Objectives and mitigating the risks that could be encountered in doing so. Our strategic risk register is monitored on a regular basis; Executive sponsors reassess their risks (pre and post mitigation) and revise plans accordingly. Regular 'deep dives' are also conducted into individual risks by the Board and Business Executive Team.

The Directors consider the principal risks to be in the areas of:

- **Operational safety and security**
- **Machinery of Government / policy change**
- **Commercial performance and financial sustainability**
- **relationships and reputation**
- **Strategy delivery and business transformation**
- **Capability (people, facilities, equipment, IT).**

Internal Controls

The system of internal control is designed to manage risk to a reasonable level rather than eliminate all risk of failure to achieve policies, aims and objectives. The system of internal control is based on an ongoing process designed to identify and prioritise risks to the achievement of NNL's policies, aims and objectives, to evaluate the likelihood of those risks being realised, the impact should they be realised and to manage them efficiently, effectively and economically.

The system of internal control is based on a framework of regular information, administrative procedures and a system of delegation and accountability. In particular it includes:

- Comprehensive budgeting and forecasting systems with an annual operating plan which is reviewed and approved by the main Board
- Regular reviews by the main Board of periodic and annual reports which indicate performance against the budget and forecast
- Setting targets and KPIs to measure financial and other performance
- Clearly defined capital investment control guidelines
- Clearly defined financial delegations

Approval

This report was approved by order of the Board.

David Dukes
Secretary

Directors' Report

FOR THE YEAR ENDED 31 MARCH 2017

The Directors present their report together with the audited financial statements for the year ended 31 March 2017.

Directors

The Directors of NNL during the year were:

Sir Andrew Mathews KCB FREng	Chairman
Paul Howarth FREng	Chief Executive Officer
Jilly Atherton	Chief HR Officer
David Beacham	Chief Customer Officer
Ruth Dunphy	Chief Financial Officer
Andrew Sherry FREng	Chief Scientist
Iain Lanaghan	Non-Executive Director
Jonathan Walker	Non-Executive Director
Mike Weightman CB FREng	Non-Executive Director

Directors' responsibilities

The Directors are responsible for preparing the strategic report, the annual 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 the Directors have elected to prepare the financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union. Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the company and of the profit or loss of the company for that period.

In preparing these financial statements, the Directors are required to:

- Select suitable accounting policies and then apply them consistently
- Make judgements and accounting estimates that are reasonable and prudent
- State whether they have been prepared in accordance with IFRS as adopted by the European Union, subject to any material departures disclosed and explained in the financial statements
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the requirements of the Companies Act 2006. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Results and dividends

The statement of comprehensive income is set out on page 31 and shows the profit for the period. A detailed review is set out in the strategic report.

The Directors do not recommend the payment of a dividend (2016 - £Nil).

Support for people with disabilities

Job applicants and NNL employees with disabilities will have the same consideration for job vacancies as any other candidates. NNL is committed to a policy of equal opportunities for all employees. Great care is exercised in our recruitment and selection procedures to ensure that there is no discrimination and that training is given to meet individual needs. Applications by people with disabilities are given full and fair consideration and wherever practical, provision is made for their special needs to help them realise their potential. The same criteria for training and promotion apply to people with disabilities as to any other employee. If an employee becomes disabled, every effort is made to ensure their continued employment. Reasonable adjustments to the workplace and to working methods will be made wherever it is reasonable and practicable to do so. People with disabilities will have the same scope to realise their potential and the same prospects as any other employees. Managers are encouraged, and have the authority, to respond to the needs of people with disabilities including adjusting working hours or responsibilities.

Employee involvement

It is NNL's policy to encourage employee involvement as the Directors consider that this is essential for the successful running of the business. NNL keeps employees informed of performance, developments and progress by way of an intranet, e-communications, newsletters and briefing sessions. Employees are represented by trade unions.

Charitable and political contributions

During the period, a total of £44,397 was made in charitable donations to support community projects and for charities promoting Science, Technology, Engineering and Mathematics (STEM) subjects (2016 - £37,900). Also during the period, a total of £53,440 of internal time was spent on corporate responsibility projects (2016 - £55,620). The level of expenditure recognises NNL's national role in underpinning STEM activities.

NNL has a policy on not making political donations and consequently there were no political donations during the period (2016 - £Nil).

Insurance

The NNL's insurance requirements are provided through policies held in its own name.

Auditor

All of the current Directors have taken all the steps that they ought to have taken to make themselves aware of any information needed by NNL's auditor for the purposes of their audit and to establish that the auditor is aware of that information. The Directors are not aware of any relevant audit information of which the auditor is unaware.

By order of the Board

David Dukes
Secretary

Independent Auditors Report

FOR THE YEAR ENDED 31 MARCH 2017

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF NATIONAL NUCELAR LABORATORIES LIMITED

We have audited the financial statements of National Nuclear Laboratories Limited for the year ended 31 March 2017 which comprise the Statement of Comprehensive Income, the Statement of Financial Position, the Statement of Changes in Equity, the Statement of Cash Flows and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union.

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

Respective responsibilities of Directors and Auditors

As explained more fully in the statement of directors' responsibilities, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Financial Reporting Council's (FRC's) Ethical Standards for Auditors.

Scope of the audit of the financial statements

A description of the scope of an audit of financial statements is provided on the FRC's website at www.frc.org.uk/auditscopeukprivate.

Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view of the state of the company's affairs as at 31 March 2017 and of its profit for the year then ended;
- have been properly prepared in accordance with IFRSs as adopted by the European Union; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

Opinion on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the strategic report and directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and directors' report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

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

Stuart Wood
(Senior Statutory Auditor)
For and on behalf of BDO LLP,
Statutory Auditor
Manchester
United Kingdom

Date

BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127).

Statement of Comprehensive Income

FOR THE YEAR ENDED 31 MARCH 2017

	Note	2017 £'000	2016 £'000
Revenue	2	**101,784**	101,341
Cost of sales		**(68,477)**	(70,949)
Gross profit		**33,307**	30,392
Administrative expenses		**(21,847)**	(20,383)
Profit from operations before exceptional items		**11,460**	10,009
Exceptional items included in administrative expenses		**(2,595)**	(6,226)
Profit from operations	3	**8,865**	3,783
Finance income	6	**1,037**	823
Finance expense	6	**(755)**	(754)
Profit before tax		**9,147**	3,852
Taxation	7	**2,739**	1,798
Profit for the year		**11,886**	5,650
Other comprehensive income			
Actuarial (losses)/gains in defined benefit pension schemes	20	**(855)**	1,704
Total other comprehensive (loss)/income		**(855)**	1,704
Total comprehensive income		**11,031**	7,354

The notes on pages 37 to 63 form part of these financial statements.

Statement of Financial Position

FOR THE YEAR ENDED 31 MARCH 2017

Company number 3857752	Note	2017 £'000	2017 £'000	2016 £'000	2016 £'000
Assets					
Non-current assets					
Property, plant and equipment	9	**59,075**		53,273	
Intangible assets	10	**4,777**		4,975	
Trade and other receivables	11	**394**		17,931	
Retirement benefit obligations	20	**-**		141	
Total non-current assets			**64,246**		76,320
Current assets					
Trade and other receivables	11	**55,401**		37,478	
Cash and cash equivalents	12	**15,785**		10,365	
Total current assets			**71,186**		47,843
Total assets			**135,432**		124,163
Equity and liabilities					
Equity					
Share capital	17	**25**		25	
Retained earnings	18	**55,052**		44,021	
Total capital and reserves attributable to equity holders of the Company			**55,077**		44,046
Non-current liabilities					
Trade and other payables	13	**31,993**		34,467	
Provisions	14	**11,967**		10,682	
Deferred tax	15	**142**			
Retirement benefit obligations	20	**487**		-	
Total non-current liabilities			**44,589**		45,149
Current liabilities					
Trade and other payables	13	**33,585**		33,683	
Provisions	14	**2,181**		1,285	
Total current liabilities			**35,766**		34,968
Total liabilities			**80,355**		80,117
Total equity and liabilities			**135,432**		124,163

The financial statements were approved and authorised for issue by the Board of Directors on and signed on its behalf by:

Ruth Dunphy
Chief Financial Officer

The notes on pages 37 to 63 form part of these financial statements.

Statement of Cash Flows

FOR THE YEAR ENDED 31 MARCH 2017

	Note	2017 £'000	2017 £'000	2016 £'000	2016 £'000
Cash flows from operating activities					
Profit before tax		**9,147**		3,852	
Adjustments for:					
Depreciation	3	**2,688**		1,984	
Amortisation	3	**440**		264	
Asset impairment	3	**-**		370	
Non-cash movements relating to share of defined benefit pension scheme obligations	20	**(855)**		1,704	
Interest receivable	6	**(1,037)**		(823)	
Interest payable	6	**755**		754	
Total cash flows from operating profit before changes in working capital and provisions			**11,138**		8,105
Decrease/(increase) in trade and other receivables		**5,200**		(4,245)	
(Decrease)/increase in trade and other payables		**(1,419)**		3,851	
Increase in provisions		**1,864**		309	
Total changes in working capital and provisions			**5,645**		(85)
Cash generated by operations		**16,783**		8,020	
Tax (paid)/received	**7**	**(1,698)**		1,107	
Total Net cash flows from operations			**15,085**		9,127
Investing activities					
Purchases of property, plant and equipment	9	**(8,747)**		(10,064)	
Purchases of intangible assets	10	**(615)**		(535)	
Total Cash flows from investing activities			**(9,362)**		(10,599)
Financing activities					
Interest received	6	**29**		32	
Interest paid	6	**(332)**		(264)	
Total Cash inflows from financing activities			**(303)**		(232)
Net decrease in cash and cash equivalents			**5,420**		(1,704)
Cash and cash equivalents at beginning of the year	12		**10,365**		12,069
Total cash and cash equivalents at end of the year	12		**15,785**		10,365

The notes on pages 37 to 63 form part of these financial statements.

Statement of Changes in Equity

FOR THE YEAR ENDED 31 MARCH 2017

	Share Capital £'000	Retained Earnings £'000	Total £'000
At 1 April 2015	25	36,667	36,692
Profit for the year	-	5,650	5,650
Other comprehensive income	-	1,704	1,704
Total comprehensive income	-	7,354	7,354
At 31 March 2016 and 1 April 2016	25	44,021	44,046
Profit for the year	-	11,886	11,886
Other comprehensive income	-	(855)	(855)
Total comprehensive income	-	11,031	11,031
At 31 March 2017	**25**	**55,052**	**55,077**

The notes on pages 37 to 63 form part of these financial statements.

Notes forming part of the financial statements

FOR THE YEAR ENDED 31 MARCH 2017

1. Accounting policies

The following principal accounting policies have been applied consistently in the preparation of these financial statements in accordance with the Companies Act 2006. The policies have been consistently applied to all the years presented, unless otherwise stated.

Basis of preparation

These financial statements have been prepared in accordance with International Financial Reporting Standards, International Accounting Standards and Interpretations (collectively IFRS), as issued by the International Accounting Standards Board (IASB) and adopted by the European Union.

The financial statements have been prepared on a historical cost basis. The preparation of financial statements in compliance with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise judgement in the most appropriate application in applying NNL's accounting policies. The areas where significant judgements and estimates have been made in preparing the financial statements and their effect are disclosed below.

NNL is exempt from preparing consolidated financial statements on the grounds that it qualifies under the Companies Act 2006 as a wholly owned subsidiary of a company registered in England and Wales for which consolidated financial statements are prepared. These financial statements therefore present information about NNL as an individual undertaking and not about its group.

All amounts are presented in sterling and, unless otherwise stated, rounded to the nearest £1,000.

Revenue

Revenue is measured at the fair value of the consideration received or receivable and represents amounts receivable for services provided in the normal course of business, net of discounts, VAT and other sales related taxes.

For contracts entered into for the provision of services extending over a period of years (long-term contracts), turnover represents the value of work done in the year including where appropriate estimates of amounts not invoiced. The majority of work performed is charged to customers based on cost with an agreed mark-up and as such, revenue is recognised in proportion to the value of work performed. Where fixed-price contracts are in place with customers, revenue is recognised against work performed.

Interest income is accrued on a time basis, by reference to the principal outstanding at the effective interest rate applicable.

Foreign currency

Transactions entered into by NNL in a currency other than sterling are recorded at the rates ruling when the transactions occur. Foreign currency monetary assets and liabilities are translated at the rates ruling at the reporting date. Exchange differences arising on the retranslation of unsettled monetary assets and liabilities are recognised immediately in the profit and loss for the period.

When a gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange component of that gain or loss shall be recognised in other comprehensive income. Conversely, when a gain or loss on a non-monetary item is recognised in the profit or loss, any exchange component of that gain or loss shall be recognised in the profit or loss.

NNL's policy is to hedge against significant foreign exchange exposures, however, at the Statement of Financial Position date NNL did not hold nor had it issued any derivative instruments, intended to hedge our exposures.

Leased assets

Where substantially all of the risks and rewards incidental to ownership are retained by the company (an "operating lease"), the total rentals payable under the lease are charged to the Statement of Comprehensive Income on a straight-line basis over the lease term.

1. Accounting policies (continued)

Retirement benefits: Defined benefit schemes

A defined benefit scheme is a pension plan that defines an amount of pension benefit that an employee will receive on retirement.

In respect of a defined benefit scheme, the pension scheme surplus or deficit represents the difference between:

- the fair value of scheme assets at the Statement of Financial Position date; less
- scheme liabilities calculated using the projected unit credit method discounted to its present value using yields available on high quality corporate bonds that have maturity dates approximating to the terms of the liabilities; plus
- adjustments for unrecognised past service costs.

The Statement of Comprehensive Income charge is split between an operating service cost and a financing charge, which is the net of the interest cost on pension scheme liabilities and expected return on plan assets. Actuarial gains and losses are recognised in full during the period, in the Statement of Comprehensive Income. If NNL cannot benefit from a scheme surplus in the form of refunds from the plan or reductions in future contributions, any asset resulting from the above policy is restricted accordingly.

Any difference between the expected return on assets and that actually achieved, and any changes in the liabilities over the year due to changes in assumptions or experience within the scheme, are recognised in other comprehensive income in the period in which they arise.

Past service costs are recognised directly in income, unless the changes to the pension plan are conditional on the employees remaining in service for a specified period of time. In this case, the past service costs are amortised on a straight line basis over the vesting period.

Where improvements are made to benefits payable under a defined benefit scheme, the effect on the plan liability is recognised in the Statement of Comprehensive Income on a straight-line basis over the average period until the employees become entitled to the improved benefits. Where the benefits vest immediately, the effect of the change is recognised immediately.

Retirement benefits: Defined contribution schemes

A defined contribution scheme is a pension plan under which NNL pays fixed contributions to a separate entity. Contributions to defined contribution pension schemes are charged to the Statement of Comprehensive Income in the period to which they relate. The Company has a defined contribution scheme with one active member and its Combined Pension Scheme (CPS) which provides defined benefits to members is accounted for on a defined contribution basis.

The CPS is a multi-employer scheme which provides defined benefits to its members. In common with other unfunded public sector schemes the CPS does not have the attributes of typical defined benefit schemes. Any surplus of contributions made in excess of benefits paid out in any year is surrendered to the Consolidated Fund and any liabilities are met from the Consolidated Fund via an annual Parliamentary vote. Her Majesty's Government does not maintain a separate fund. In common with defined benefit pension schemes NNL does however bear the risk that it will have to increase its contributions in accordance with the Government Actuaries Department's assessment of the funding required to provide benefits under the scheme.

Financial assets

NNL classifies its financial assets into one of the following categories, depending on the nature of the asset. NNL's accounting policy for each category is as follows:

Property, Plant and Equipment

Property, Plant and Equipment (other than assets in the course of construction) are stated in the Statement of Financial Position at cost less accumulated depreciation. Assets in the course of construction are stated at cost and are not depreciated until commissioned. The cost of assets will include directly attributable staff costs associated with bringing the asset into the location and condition for it to be capable of operating in the manner intended by management. This includes the cost of testing whether the asset is functioning properly.

The carrying values of Property, Plant and Equipment are reviewed for impairment if events or changes in circumstances indicate that a provision for impairment is required. Accumulated depreciation includes any additional charges made where necessary to reflect impairments in value.

Depreciation is calculated to write off historical costs less residual value of assets, by equal annual instalments over their estimated useful economic lives as follows:

Plant and machinery - 3 to 20 years

Fixtures and fittings - 3 to 10 years

Intangible assets

Intangible assets are measured initially at cost and are amortised on a straight-line basis over their estimated useful lives. The carrying

1. Accounting policies (continued)

Intangible assets (continued)

amount is reduced by any provision for impairment where necessary.

Internal expenditure is capitalised as internally generated intangibles only if it meets the criteria of IAS 38 'Intangible Assets'.

Criteria of IAS 38 - the asset is separable, i.e. it is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable asset or liability, regardless of whether the entity intends to do so, or arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.

The cost of the intangible asset must be able to be measured reliably.

Service Concessions

The service concession arrangement on Phase 2 works at the Company's Central Laboratory consists of future revenue, some of which is guaranteed. The guaranteed and fixed future revenue are classified as a financial asset loan receivable. An intangible asset is recognised for the non-guaranteed future revenue where it is probable that the revenue will be generated.

Intangible assets are amortised on a straight line basis over their estimated useful lives:

Computer software - 1 to 5 years

Service concessions - 6 years

Trade and other receivables

Trade and other receivables arise principally through the provision of goods and services to customers (trade debtors), but also incorporate other types of contractual monetary asset.

Impairment provisions are recognised when there is objective evidence (such as significant financial difficulties on the part of the counterparty or default or significant delay in payment) that NNL will be unable to collect all of the amounts due. The amount of such a provision being the difference between the net carrying amount and the future expected cash flows associated with the impaired receivable.

For trade receivables, which are carried at cost less any provision for impairment; such provisions are recorded in a separate allowance account with the loss being recognised within administrative expenses in the Statement of Comprehensive Income. On confirmation that the trade receivable will not be collectable, the gross carrying value of the asset is written off against the associated provision.

Deferred taxation

Deferred tax assets and liabilities are recognised where the carrying amount of an asset or liability in the Statement of Financial Position differs to its tax base, except for differences arising on the initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction affects neither accounting or taxable profit.

Recognition of deferred tax assets is restricted to those instances where it is probable that taxable profit will be available against which the difference can be utilised.

The amount of the asset or liability is determined using tax rates that have been enacted or substantially enacted by the Statement of Financial Position date and are expected to apply when the deferred tax liabilities are settled. Deferred tax balances are not discounted.

Cash and cash equivalents

These include cash in hand and deposits held at call with banks.

Financial liabilities

NNL classifies its financial liabilities into one of the following categories, depending on the nature of the liability. NNL's accounting policy for each category is as follows:

Trade and other payables

Trade payables and other short-term monetary liabilities, which are recognised at fair value.

Government grants

Grants relating to expenditure on property, plant and equipment are recognised in the Statement of Comprehensive Income at the same rate as the depreciation on the assets to which the grant relates. The deferred element of grants is included in liabilities as other payables. Grants relating to revenue expenditure are recognised in the statement of comprehensive income in the same period in which the revenue expenditure arises.

Provisions

Provisions are recognised, at current price levels, for liabilities of uncertain timing or amount that have arisen as a result of past transactions and are discounted at 2.5%, a pre-tax rate reflecting current market assessments of the time value of money and the risks specific to the liability.

Revalorisation

Revalorisation arises because provisions are stated in the Statement of Financial Position at current price levels and discounted at 2.5% per annum

1. Accounting policies (continued)

Financial liabilities (continued)

from the eventual payment dates. The revalorisation charge is the adjustment that results from restating these liabilities to take into account the effect of inflation in the year and to remove the effect of one year's discount as the eventual dates of payment become one year closer. The inflation rate used is specific to the expected cost increase in the underlying liability. Each year the finance charges in the Statement of Comprehensive Income include revalorisation required to discharge one year's inflation and discount from the liability.

Share capital

Financial instruments issued by NNL are treated as equity only to the extent that they do not meet the definition of a financial liability. NNL's ordinary shares are classified as equity instruments.

Critical accounting estimates and judgements

NNL makes estimates and assumptions regarding the future. Estimates and judgements are continually evaluated based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. In the future, actual experience may differ from these estimates and assumptions. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

Judgements

(a) Useful lives of intangible and tangible assets
Intangible and tangible assets are amortised or depreciated over their useful lives.

Useful lives are based on the Directors' estimates of the period that the assets will generate revenue, which are periodically reviewed for continued appropriateness.

Changes to estimates can result in significant variations in the carrying value and amounts charged to the Statement of Comprehensive Income in specific periods. More details including carrying values are included in notes 9 and 10.

(b) Provisions
The provisions recorded in the financial statements represent the Directors' best estimates of the costs expected to be incurred as at the Statement of Financial Position date.

Early retirees

The provision relates to the cost of funding the pension payments for specific individuals who are expected to leave under an early retirement scheme at the age of 60, five years before they are able to draw their pension at 65. NNL is liable for these pension payments from the age of 60 to 65. The amounts provided are based on best estimates of the anticipated pensions for the employees in questions and will be utilised over the next seven years.

Severance

The severance provision relates to severance obligations payable as pensions to employees who left NNL through redundancy. The amounts provided are based on best estimates of the severance costs of employees who have left under severance terms and will be utilised over the next 30 years.

Loss making contracts

These are onerous contract provisions and have been calculated based on the latest technical evaluation of the processes and methods likely to be used, and reflect current knowledge. The provision relates to fixed-price, loss-making contracts. The loss has been calculated based on current costs and performance in line with the agreed schedule of work for the remaining duration of the contracts.

POCO

These provisions are based on such commercial agreements that are currently in place, and reflect the Directors' understanding of the current Company Policy and Regulatory Framework. NNL is responsible for Post Operational Clean Out (POCO) costs or removing and disposing of the plant, equipment and consumables which have become radiologically contaminated during operations within the facilities. Of the total other provision £6.4m relates to POCO (2016 - £4.3m). The provision has been estimated based on the weight, packing density and levels of contamination of the plant, equipment and consumables contaminated, multiplied by the agreed cost of disposal with the appropriate supplier. The provision represents the best estimate of the future cashflows required to meet these obligations. Due to the nature of the provision the future utilisation of the provision is uncertain.

The provisions recorded in these financial statements are shown in note 14.

(c) Pension assumptions
NNL's share of costs, assets and liabilities of the defined benefit scheme are determined using methods relying on actuarial estimates and assumptions. Details of the key assumptions are set out in note 20.

NNL takes advice from independent actuaries relating to the appropriateness of the assumptions. Changes in the assumptions used may have a significant effect on the Statement of Comprehensive Income and the Statement of Financial Position.

(d) Revenue Recognition
Revenue is recognised to the extent

1. Accounting policies (continued)

Critical accounting estimates and judgements (continued)

that work has been completed and an agreed purchase order from a customer covering the work is held. As a result on 31 March 2017 £12.7m (2016 - £18.7m of accrued income was recognised as NNL had completed work before the balance sheet date and held agreed purchase orders.

New standards and interpretations

The accounting policies adopted are consistent with those of the previous year except as follows:

In preparing the Company financial statements for the current year, the Company has adopted the following new International Financial Reporting Standards (IFRS), amendments to IFRS and International Financial Reporting Interpretations Committee (IFRIC) interpretations, none of which have had a significant effect on the results or net assets of the group:

(i) New standards, amendments to published standards and interpretations to existing standards effective in the current financial year adopted by the Company:

- Clarification of Acceptable Methods of Depreciation and Amortisation: Amendments to IAS 16 and IAS 38
- Annual Improvements to IFRSs (2012-2014 Cycle)
- Disclosure Initiative (Amendments to IAS 1)
- Investment Entities (Amendments to IFRS 10, IFRS 12 and IAS 27).

(ii) Standards, amendments and interpretations to published standards not yet effective.

The following new standards, interpretations and amendments, which are not yet effective and have not been adopted early in these financial statements, will or may have an effect on the Company's future financial statements:

- IFRS 9 Financial Instruments
- IFRS 15 Revenue from Contracts with Customers
- IFRS 16 Leases
- Recognition of deferred tax assets for unrealised losses (Amendments to IAS 12)
- Disclosure Initiative (Amendments to IAS 7)
- Clarifications to IFRS 15 revenue from Contracts with Customers
- Annual Improvements to IFRSs (2014-2016 Cycle).

In respect of the above, the directors are specifically reviewing the requirements of IFRS 15, which will become effective for the 31 March 2019 year end. In particular an assessment is ongoing around specific elements within the standard's guidance relating to being able to clearly identify separate performance obligations within each contract, determining and allocating a transaction price to these performance obligations, the impact of contract modifications at a later date and contract costs. Similarly the directors are reviewing the impact of IFRS 16, which will become effective for the 31 March 2020 year end. At the current year end the total minimum lease payments on operating leased assets is £23.7m (see note 19). As a result it is expected the assets and liabilities for leased assets would be significantly higher if IFRS 16 were effective at the current time.

None of the other new standards, interpretations and amendments, which are effective for periods beginning on or after 1 January 2016 and which have not been adopted early, are expected to have a material effect on the Company's future financial statements.

2. Revenue and business segments

NNL's principal activity is the provision of technology services across the nuclear fuel cycle.

The Directors are of the opinion that NNL's activities fall within one operating segment, being the provision of technology services across the nuclear fuel cycle. There are three key areas of this cycle: waste management and decommissioning, fuel cycle solutions and reactor operations support.

Revenue arises entirely from the sale of services. Sales to overseas customers make up a small proportion of total revenue at £1,784,450 (2016 - £1,307,718).

3. Profit from operations

This has been arrived at after charging:	2017 £'000	2016 £'000
Staff costs (see note 4)	48,961	49,394
Depreciation (see note 9)	2,688	1,983
Amortisation (see note 10)	440	264
Asset impairment (see note 9)	-	370
Research and development expenses	1,529	918
Operating lease expense:		
- rent	2,235	2,002
- other	168	201
Auditor's remuneration:		
- audit services	31	31
- other services	30	25
Foreign exchange loss/(gain) (see note 6)	32	(35)
Exceptional item:		
Costs associated with business transformation programme	2,595	-
Costs associated with restructuring programme	-	6,226
	2,595	6,226

Research and development (R&D) expenses reflects all the Company's self-funded R&D programme expenditure excluding staff costs.

Exceptional costs of £2.6m in the year represent the setup of the business transformation programme and delivery teams. Prior year exceptional cost of £6.2m represents the cost of a redundancy program which saw over 100 people leave the business.

4. Staff costs

Staff costs (including executive and non-executive directors) comprise:	2017 £'000	2016 £'000
Wages and salaries	38,894	39,896
Social security costs	4,419	3,641
Pension costs	5,467	5,605
Defined benefit pension cost (note 20)	181	252
	48,961	49,394

The average number of employees during the period was as follows:	2017 Number	2016 Number
Scientific, technical, engineering and facilities	667	721
Administrative	131	118
	798	839

5. Directors' remuneration

Directors' remuneration for both executive and non-executive directors consists of:	2017 £'000	2016 £'000
Emoluments	928	672
Amounts paid to third parties in respect of directors' services	-	149
	928	821

There were five directors in NNL's defined benefit scheme over the course of the year, however NNL made a full year of contributions for only four of the directors. Increases in Directors Remuneration from 2016 to 2017 are as a result of an increase in the full time equivalents employed to 8.5 (2016 7.5).

The highest paid director received remuneration of £257,180 (2016 - £249,552).

Paul Howarth the Managing Director was employed by NNL from 1 October 2015. The previous six months he was seconded to NNL under an agreement with Battelle UK Limited which was paid a management base fee.

6. Finance income and expense

Finance income:	2017 £'000	2016 £'000
Bank interest receivable	29	32
Finance debtor income	1,008	756
Foreign exchange gain	-	35
	1,037	823
Finance expense:		
Bank charges	4	4
Interest payable on loans from group undertakings	259	261
Revalorisation	460	489
Foreign exchange loss	32	-
	755	754

7. Tax credit

United Kingdom corporation tax credit	2017 £'000	2016 £'000
Current year	(2,252)	(1,135)
Adjustments in respect of prior years	1,285	(42)
Tax reclaimed on research and development	3,848	2,975
Total tax credit	**2,881**	1,798
Deferred tax		
Origination and reversal of temporary differences	(142)	-
Total deferred tax charge	(142)	-
Total tax on profits on ordinary activities	**2,739**	1,798

The reasons for the difference between the actual tax charge for the year and the standard rate of corporation tax in the United Kingdom applied to profits for the year are as follows:

	2017 £'000	2016 £'000
Profit before tax	**9,147**	3,852
Expected tax charge based on the standard rate of corporation tax in the UK of 20% (2016 - 20%)	(1,829)	(770)
Items not deductible for tax purposes and other items	(156)	(263)
Pension scheme adjustments (IAS 19)	171	(341)
Movement in deferred tax not recognised	190	834
Tax credits on research and development	(770)	(595)
Tax reclaimed on research and development	3,848	2,975
Adjustments in respect of prior years	1,285	(42)
Total taxation credit for the year	**2,739**	1,798

NNL's tax reclaim for 2017 is £3,848,097 (2016 - £2,975,763). This is due to tax credits received from HMRC for research and development activities.

Future tax liabilities arising from operations are expected to be offset by tax credits on research and development.

8. Dividends

No dividends have been declared or paid during the current or previous year.

9. Property, plant and equipment

	Plant and Machinery £'000	Fixtures and fittings £'000	Assets in the course of construction £'000	Total £'000
Cost				
At 1 April 2015	5,802	15,171	30,979	51,952
Additions	97	53	10,646	10,796
Transfers from assets in course of construction	3,613	6,071	(9,684)	-
Disposals	(1,314)	(508)	(1,484)	(3,306)
At 31 March 2016	8,198	20,787	30,457	59,442
Accumulated depreciation and impairment				
At 1 April 2015	2,877	3,130	1,114	7,121
Depreciation charge for the year	1,007	977	-	1,984
Impairment loss	-	-	370	370
Disposals	(1,314)	(508)	(1,484)	(3,306)
At 31 March 2016	2,570	3,599	-	6,169
Net book value				
At 1 April 2015	2,925	12,041	29,865	44,831
At 31 March 2016	5,628	17,188	30,457	53,273
Cost				
At 1 April 2016	8,198	20,787	30,457	59,442
Additions	25	372	7,732	8,129
Reclassification from intangible assets	-	342	22	364
Transfers from assets in course of construction	2,091	13,112	(15,203)	-
At 31 March 2017	**10,314**	**34,613**	**23,008**	**67,935**
Accumulated depreciation and impairment				
At 1 April 2016	2,570	3,599	-	6,169
Depreciation charge for the year	972	1,716	-	2,688
Reclassification from intangible assets	-	3	-	3
At 31 March 2017	**3,542**	**5,318**	**-**	**8,860**
Net book value				
At 1 April 2016	5,628	17,188	30,457	53,273
At 31 March 2017	**6,772**	**29,295**	**23,008**	**59,075**

Assets in the course of construction refer to a number of ongoing major projects including Windscale Laboratory enhancements, commissioning of Central Laboratory Phase 3 and establishment of both a Nuclear Fuel Centre of Excellence and National Nuclear User Facility. Additions include £113k of accrued costs not yet invoiced (2016 - £731k). Reclassifications represents amounts disclosed as intangible assets in 2016 now considered to be items of property plant and equipment.

10. Intangible assets

	Computer software £'000	Service concession £'000	Assets in the course of construction £'000	Total £'000
Cost				
At 1 April 2015	2,468	3,985	52	6,505
Additions	-	-	855	855
Transfers from assets in course of construction	497	-	(497)	-
Revaluation	-	(296)	-	(296)
Disposals	(544)	-	-	(544)
At 31 March 2016	2,421	3,689	410	6,520
Accumulated amortisation				
At 1 April 2015	1,825	-	-	1,825
Amortisation charge for the year	264	-	-	264
Disposals	(544)	-	-	(544)
At 31 March 2016	1,545	-	-	1,545
Net book value				
At 1 April 2015	643	3,985	52	4,680
31 March 2016	876	3,689	410	4,975
Cost				
At 1 April 2016	2,421	3,689	410	6,520
Additions	-	93	510	603
Reclassification to property, plant and equipment	(342)	-	(22)	(364)
Transfers from assets in course of construction	214	-	(214)	-
Disposals	(113)	-	-	(113)
At 31 March 2017	**2,180**	**3,782**	**684**	**6,646**
Accumulated amortisation				
At 1 April 2016	1,545	-	-	1,545
Reclassification to property, plant and equipment	(3)	-	-	(3)
Amortisation charge for the year	440	-	-	440
Disposals	(113)	-	-	(113)
At 31 March 2017	**1,869**	**-**	**-**	**1,869**
Net book value				
At 1 April 2016	876	3,689	410	4,975
At 31 March 2017	**311**	**3,782**	**684**	**4,777**

Additions include £12k of accrued costs not yet invoiced (2016 - £24k). Reclassifications represents amounts disclosed as intangible in 2016 now considered to be items of property, plant & equipment.

11. Trade and other receivables

	2017 £'000	2016 £'000
Trade receivables	33,850	14,736
Amounts due from group undertakings	104	-
Prepayments and accrued income	13,561	19,263
Corporation tax	6,997	2,418
Other receivables	1,283	18,992
Total trade and other receivables	**55,795**	55,409
Less: non-current trade and other receivables	(394)	(17,931)
Current trade and other receivables	**55,401**	37,478

The ageing of non-current other receivables are as follows:

	2017 Finance Debtor £'000	2017 Other £'000	2017 Total £'000	2016 Finance Debtor £'000	2016 Other £'000	2016 Total £'000
1-2 years	-	163	163	2,963	132	3,095
2-5 years	-	108	108	8,889	268	9,157
Over 5 years	-	123	123	5,679	-	5,679
	-	**394**	**394**	17,531	400	17,931

There has been a significant reduction in non-current trade and other receivable as Sellafield Ltd opted to pay off the Phase 2 commissioning debt subsequent to the year end in April 2017 rather than over six years as previously contracted. At 31 March 2017 the full amount of the debt is included in current assets as it was invoiced at the year end.

11. Trade and other receivables (continued)

The fair value of trade and other receivables classified as loans and receivables approximates to their carrying value at 31 March 2017 and 31 March 2016.

The carrying value of NNL's trade and other receivables, and amounts due from group undertakings are denominated in the following currencies:

	2017 £'000	2016 £'000
Pound sterling	55,698	55,145
US Dollar	7	239
Euro	90	25
	55,795	55,409

At 31 March 2017 no trade receivables were impaired (2016 - £Nil). As at 31 March 2017 trade receivables of £724,741 (2016 - £2,632,815) were past due but not impaired. Only £6,300 of the overdue debt from the year end remains unpaid.

The ageing of trade receivables are as follows:

	2017 Related parties £'000	2017 Third parties £'000	2017 Total £'000	2016 Related parties £'000	2016 Third parties £'000	2016 Total £'000
Not yet due	24,855	8,270	33,125	3,773	8,330	12,103
1-30 days	18	145	163	1,958	533	2,491
31-60 days	327	225	552	(45)	187	142
61-90 days	-	3	3	-	-	-
Over 91 days	17	(10)	7	-	-	-
	25,217	**8,633**	**33,850**	5,686	9,050	14,736

12. Cash and cash equivalents

The cash and cash equivalent balances are broken down as follows:

	2017 £'000	2016 £'000
Cash available on demand	**15,785**	10,365

Book values equal fair values at 31 March 2017 and 2016. All day to day banking matters are dealt with by the NatWest Bank, part of the RBS group.

13. Trade and other payables

	2017 £'000	2016 £'000
Payments received on account	7,118	8,955
Trade payables	3,044	2,003
Amounts due to group undertakings	-	4,068
Taxation and social security	7,695	3,897
Accruals	47,721	49,227
	65,578	68,150
Less: non-current trade and other payables	(31,993)	(34,467)
Current trade and other payables	**33,585**	33,683

The ageing of non-current other payables are as follows:

	2017 Capital grants £'000	2017 Group loan £'000	2017 Total £'000	2016 Capital grants £'000	2016 Group loan £'000	2016 Total £'000
1-2 years	1,160	-	1,160	944	2,400	3,344
2-5 years	3,480	-	3,480	2,833	1,600	4,433
Over 5 years	27,353	-	27,353	26,690	-	26,690
	31,993	**-**	**31,993**	30,467	4,000	34,467

The carrying value of the Group's trade and other payables are denominated in the following currencies:

	2017 £'000	2016 £'000
Pound sterling	**65,578**	68,150

Book values equal fair values at 31 March 2017 and 2016.

The ageing of the trade payables are as follows:

	2017 Related parties £'000	2017 Third Parties £'000	2017 Total £'000	2016 Related parties £'000	2016 Third Parties £'000	2016 Total £'000
Not yet due	821	2,223	3,044	371	616	987
1-30 days	-	-	-	-	976	976
31-60 days	-	-	-	-	32	32
61-90 days	-	-	-	-	8	8
Over 91 days	-	-	-	-	-	-
	821	**2,223**	**3,044**	371	1,632	2,003

14. Provisions

	Early retirees £'000	Severance £'000	Loss making contracts £'000	Other £'000	Total £'000
At 1 April 2016	1,085	4,563	2,015	4,304	11,967
Reclassification	(7)	7	-	-	-
Charged to profit or loss	-	-	435	2,246	2,681
Utilised in year	149	(452)	-	(253)	(556)
Revalorisation	22	114	110	213	460
Released in the year	(112)	(151)	(4)	(136)	(404)
At 31 March 2017	**1,137**	**4,081**	**2,556**	**6,374**	**14,148**
At 1 April 2016					
Due within one year or less	114	410	747	14	1,285
Due after more than one year	971	4,153	1,268	4,290	10,682
	1,085	4,563	2,015	4,304	11,967
At 31 March 2017					
Due within one year or less	433	379	1,352	17	2,181
Due after more than one year	703	3,702	1,204	6,357	11,967
	1,137	**4,081**	**2,556**	**6,374**	**14,148**

Details of each category of provision are shown in note 1 to the financial statements.

15. Deferred tax

Due to the carrying amount of assets and liabilities in the Statement of Financial Position differing to their tax base, at 31 March 2016 NNL had a potential deferred tax asset. However NNL did not expect to utilise this deferred tax asset, principally due to the anticipated annual research and development tax credit claims exceeding the expected tax liability on future annual taxable profits. At 31 March 2017 a deferred tax liability is recognised as disclosed below.

A breakdown of the deferred tax asset that has not been recognised is as follows:

	2017 £'000	2016 £'000
Other timing differences	-	1,032
Depreciation in excess of capital allowances	-	(884)
Deferred tax asset not recognised	**-**	148

	2017 £'000	2016 £'000
Provision at start of year	-	-
Deferred tax charged in the year	142	-
Provision at end of year	**142**	-

16: Financial instruments - Risk Management

Principal financial instruments

The principal financial instruments used by NNL, from which financial instrument risk arises, are as follows:

- Trade receivables
- Cash at bank
- Trade and other payables

In common with all other businesses NNL is exposed to risks that arise from its use of financial instruments. This note describes NNL's policies and processes for managing those risks and the methods used to measure them including quantitative information in respect of these risks.

NNL is exposed through its operations to the following financial risks:

- Foreign exchange risk - transactional risk from receipts/purchases in a foreign currency
- Credit risk - suppliers not able to fulfil contractual obligation due to financial difficulty and customer inability to pay
- Liquidity risk - managing the cash flows of NNL effectively

There have been no substantive changes in NNL's exposure to financial instrument risks or its objectives, policies and processes for managing those risks from the previous year.

16: Financial instruments - Risk Management (continued)

Financial risk management objectives

NNL's treasury policy is structured to ensure that adequate financial resources are available for the development of its business whilst managing its currency, interest rate and counterparty credit risks. NNL's treasury policy is approved by the Board of Directors.

The overall objective of the Board is to set polices that seek to reduce risk as far as possible without unduly affecting NNL's competitiveness and flexibility. Further details regarding these policies are set out below:

Foreign exchange risk management

Foreign currency exposures are limited as NNL's functional currency is Sterling, although a minor proportion of revenue and expenditure is denominated in Euros and U.S Dollars.

The carrying value of NNL's cash and cash equivalents are denominated in the following currencies:

	2017 £'000	2016 £'000
Pound Sterling	15,615	10,275
US Dollar	88	64
Euro	82	26
	15,785	10,365

Foreign exchange risk is not considered to be material in either the current or the preceding period.

Credit risk management

At the statement of financial position date NNL's maximum exposure to credit risks was as follows:

	2017 Carrying value £'000	2017 Maximum exposure £'000	2016 Carrying Value £'000	2016 Maximum exposure £'000
Cash and cash equivalents	15,785	15,785	10,365	10,365
Trade and other receivables	55,795	55,795	55,409	55,409
Total financial assets	**71,580**	**71,580**	65,774	65,774

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. NNL is exposed to credit risk from its trade receivables due from customers and cash deposits with financial institutions.

Trade receivables balances are not covered by credit insurance but customers are deemed to be of sufficient credit worthiness in order that NNL will continue to conduct trade with them.

16: Financial instruments - Risk Management (continued)

The following internal procedures are undertaken in order to assess whether NNL will grant a credit facility to them:

- obtaining status reports and reference reports for new companies;
- reviewing of the trading history and payments records.

Additional safeguards include the following:

- internal credit limits being set on all accounts which are only increased by credit controllers;
- stop-lists produced on overdue accounts;
- vigorous collection strategy in place.

Credit risk also arises from cash and cash equivalents and deposits with banks and financial institutions. For banks and financial institutions, only independently rated parties with a minimum "A" credit rating are accepted.

'A' ratings denote expectations of low default risk. The capacity for payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher ratings.

At the end of the current year and preceding year there were no significant concentrations of credit risk.

Liquidity risk management

NNL's policy is to ensure that it will always have sufficient resources to allow it to meet its liabilities as they become due.

Budgets are set and agreed by the Board of Directors in advance, to enable NNL's cash requirements to be anticipated.

Capital management

NNL manages its capital to ensure that it will be able to continue as a going concern. There have been no changes to NNL's objectives, policies and processes for managing capital from the previous period.

NNL's capital consists of cash and cash equivalents and equity attributable to equity holders of the parent. Such equity comprises share capital, and retained earnings. There have been no changes in what NNL manages as capital from the previous period.

The Board of Directors reviews NNL's capital requirements on a regular basis. Based on this review, NNL will balance its overall capital requirements through new share issues, requests for capital contributions from the parent Company, and the raising of debt financing where considered necessary.

17. Share capital

Authorised, issued and fully paid

	2017 Number	2016 Number	2017 £'000	2016 £'000
Ordinary shares of £1 each	**25,000**	25,000	**25**	25

18. Reserves

	2017 £'000	2016 £'000
Reserves at beginning of the year	44,021	36,667
Profit for the year	11,886	5,650
Other comprehensive (loss)/income	(855)	1,704
Total comprehensive income	11,031	7,354
Reserves at end of the year	**55,052**	44,021

19. Leases

Operating leases

NNL leases all its trading locations.

NNL also leases plant and equipment from third parties. All leases are considered to be operating leases. NNL has not entered into any finance lease or hire purchase arrangements.

The total of future minimum lease payments due is as follows:

Lease cost to expiry:	2017 Land and buildings £'000	2016 Land and buildings £'000	2017 Other £'000	2016 Other £'000
Not later than one year	2,243	2,327	126	173
Between one year and five years	7,139	7,859	68	194
Later than five years	14,107	15,630	-	-
	23,489	25,816	**194**	367

20. Retirement benefits

Schemes accounted for as defined contribution

Combined Pension Scheme (CPS)

The CPS is a multi-employer scheme which provides defined benefits to its members. In common with other unfunded public sector schemes the CPS does not have the attributes of typical defined benefit pension schemes. Any surplus of contributions made in excess of benefits paid out in any year is surrendered to the Consolidated Fund and any liabilities are met from the Consolidated Fund via the annual Parliamentary vote. Her Majesty's Government does not maintain a separate fund.

The CPS is accounted for as a defined contribution scheme. The pension charge for the period represents contributions payable by NNL to the scheme and amounts to £5,256,467 (2016 - £5,399,057).

Schemes accounted for as defined benefit

Combined Nuclear Pension Plan (CNPP)

The CNPP is a funded scheme (previously named GPS). The Company's contribution rate is 33.8%. The CNPP is accounted for as a defined benefit scheme. A full actuarial valuation on an IAS 19 basis was carried out for the Trustees at 31 March 2016. This has been updated to 31 March 2017 by a qualified independent actuary. The actuarial assumption for salary increases was 4.3%.

Electricity Supply Pension Scheme (ESPS)

The ESPS is a funded scheme. The Company's contribution rate is 35.2%. The ESPS is accounted for as a defined benefit scheme. . A full actuarial valuation on an IAS 19 basis was carried out for the Trustees at 31 March 2016. This has been updated to 31 March 2017 by a qualified independent actuary. The actuarial assumption for salary increases was 4.3%.

Details of NNL's defined benefit schemes are as follows:

	2017 CNPP £'000	2017 ESPS £'000	2017 Total £'000	2016 CNPP £'000	2016 ESPS £'000	2016 Total £'000
Fair value of scheme assets	**4,661**	**9,936**	**14,597**	3,897	8,313	12,210
Present value of scheme liabilities	**(4,844)**	**(10,240)**	**(15,084)**	(3,769)	(8,300)	(12,069)
(Deficit) / Surplus in the scheme	**(183)**	**(304)**	**(487)**	128	13	141

20. Retirement benefits (continued)

Principal actuarial assumptions

Assumptions regarding future mortality experience are set based on advice in accordance with published statistics and experience.

The average life expectancy in years of a pensioner retiring at 65 on the Statement of Financial Position date is as follows:

	2017 CNPP years	2016 CNPP years	2017 ESPS years	2016 ESPS years
Male	**22**	23	**22**	23
Female	**24**	25	**24**	25

The average life expectancy in years of a pensioner retiring at 65, twenty years after the Statement of Financial Position date is as follows:

	2017 CNPP years	2016 CNPP years	2017 ESPS years	2016 ESPS years
Male	**24**	25	**24**	25
Female	**26**	27	**26**	27

Expected increases in pensions in payment, discount rates, and inflation are as follows:

	2017 CNPP	2016 CNPP	2017 ESPS	2016 ESPS
Expected increase in pensions-in-payment	**3.3%**	3.0%	**3.3%**	3.0%
Discount rate pensioner liabilities	**2.4%**	3.6%	**2.4%**	3.6%
Discount rate deferred and active liabilities	**2.7%**	3.6%	**2.7%**	3.6%
Inflation rate	**3.3%**	3.0%	**3.3%**	3.0%

Expected discount rates, which are significantly lower than 2016 levels, are based on market yields on AA rated corporate bonds. Different discount rates have been applied to each group of members to recognise the cash flow timings attributable to each group.

20. Retirement benefits (continued)

Defined Benefit Obligation trends

	CNPP £'000	ESPS £'000	Total £'000
At 1 April 2015	3,899	8,182	12,081
Expected return on plan assets	129	274	403
Employer contributions	63	340	403
Benefits paid	(46)	(135)	(181)
Contributions by scheme participants	9	27	36
Actual return less expected return on pension scheme assets	(157)	(375)	(532)
At 31 March 2016	3,897	8,313	12,210
At 1 April 2016	3,897	8,313	12,210
Expected return on plan assets	141	304	445
Employer contributions	65	343	408
Benefits paid	(46)	(131)	(177)
Contributions by scheme participants	10	28	38
Actual return less expected return on pension scheme assets	594	1,079	1,673
At 31 March 2017	**4,661**	**9,936**	**14,597**

Reconciliation of scheme assets

The expected return on scheme assets is equal to the weighted average return appropriate to each class of asset within the schemes. The return attributed to each class has been reached following discussions with the external actuaries.

The fair value of the scheme assets and the expected rates of return at 31 March 2017 and at 31 March 2016 were as follows:

CNPP	2017 Expected rate of return	2017 Fair value return	2016 Expected rate of £'000	2016 Fair Value £'000
Equities	2.4%	2,344	3.6%	1,384
Index-linked gilts	2.4%	-	3.6%	978
Corporate bonds	2.4%	2,253	3.6%	929
Diversified	2.4%	-	3.6%	539
Other	2.4%	64	3.6%	67
		4,661		3,897

20. Retirement benefits (continued)

Reconciliation of scheme assets

ESPS	2017 Expected rate of return	2017 Fair value return	2016 Expected rate of £'000	2016 Fair value £'000
Equities	2.4%	2,449	3.6%	2,063
Diversified Growth Fund	2.4%	2,452	3.6%	2,191
Index-linked gilts	2.4%	3,190	3.6%	2,615
Corporate bonds	2.4%	1,295	3.6%	1,130
Currency	2.4%	550	3.6%	314
		9,936		8,313

Reconciliation of plan liabilities

	CNPP £'000	ESPS £'000	Total £'000
At 1 April 2015	4,490	9,305	13,795
Interest cost	148	308	456
Current service cost	62	137	199
Benefits paid	(46)	(135)	(181)
Changes in assumptions underlying present value of schemes liabilities	(894)	(1,342)	(2,236)
Contributions by scheme participants	9	27	36
At 31 March 2016	3,769	8,300	12,069
At 1 April 2016	3,769	8,300	12,069
Interest cost	136	299	435
Current service cost	57	134	191
Benefits paid	(46)	(131)	(177)
Changes in assumptions underlying present value of schemes liabilities	918	1,610	2,528
Contributions by scheme participants	10	28	38
At 31 March 2017	**4,844**	**10,240**	**15,084**

20. Retirement benefits (continued)

Defined benefit obligation trends of scheme as a whole as at 31 March 2016

	CNPP £'000	ESPS £'000	Total £'000
Scheme assets	3,897	8,313	12,210
Scheme liabilities	(3,769)	(8,300)	(12,069)
Scheme surplus	128	13	141
Experience adjustments on assets	**(157)**	**(375)**	**(532)**
As a % of scheme assets	**(4.0%)**	**(4.5%)**	**(4.4%)**

Defined benefit obligation trends of scheme as a whole as at 31 March 2017

	CNPP £'000	ESPS £'000	Total £'000
Scheme assets	4,661	9,936	14,597
Scheme liabilities	(4,844)	(10,240)	(15,084)
Scheme Deficit	(183)	(304)	(487)
Experience adjustments on assets	**594**	**1,079**	**1,673**
As a % of scheme assets	**12.7%**	**10.9%**	**11.5%**

20. Retirement benefits (continued)

Movement in overall scheme (deficit)/surplus from 1 April 2015 to 31 March 2016

	CNPP £'000	ESPS £'000	Total £'000
At 1 April 2015	(591)	(1,123)	(1,714)
Operating costs	(62)	(137)	(199)
Expected return on pension scheme assets	129	274	403
Interest on pension scheme liabilities	(148)	(308)	(456)
Actuarial gains and losses	737	967	1,704
Contributions paid	63	340	403
At 31 March 2016	128	13	141

Movement in overall scheme surplus/(deficit) from 1 April 2016 to 31 March 2017

	CNPP £'000	ESPS £'000	Total £'000
At 1 April 2016	128	13	141
Operating costs	(57)	(134)	(191)
Expected return on pension scheme assets	141	304	445
Interest on pension scheme liabilities	(136)	(299)	(435)
Actuarial gains and losses	(324)	(531)	(855)
Contributions paid	65	343	408
At 31 March 2017	**(183)**	**(304)**	**(487)**

20. Retirement benefits (continued)

Amounts recognised in the financial statements

Analysis of amounts recognised in the statement of financial position.

CNPP	2017 £'000	2016 £'000	2015 £'000	2014 £'000
Fair value of scheme assets	**4,661**	3,897	3,899	3,381
Present value of scheme liabilities	**(4,844)**	(3,769)	(4,490)	(3,477)
Net pension (liability)/asset	**(183)**	128	(591)	(96)

ESPS	2017 £'000	2016 £'000	2015 £'000	2014 £'000
Fair value of scheme assets	**9,936**	8,313	8,182	6,859
Present value of scheme liabilities	**(10,240)**	(8,300)	(9,305)	(7,163)
Net pension (liability)/asset	**(304)**	13	(1,123)	(304)

Total	2017 £'000	2016 £'000	2015 £'000	2014 £'000
Fair value of scheme assets	**14,597**	12,210	12,081	10,240
Present value of scheme liabilities	**(15,084)**	(12,069)	(13,795)	(10,640)
Net pension (liability)/asset	**(487)**	141	(1,714)	(400)

Included in administrative expenses

	2017 CNPP £'000	2017 ESPS £'000	2017 Total £'000	2016 CNPP £'000	2016 ESPS £'000	2016 Total £'000
Current service cost	**57**	**134**	**191**	62	137	199
Expected return on plan	**(141)**	**(304)**	**(445)**	(129)	(274)	(403)
Interest cost	**136**	**299**	**435**	148	308	456
Defined benefit pension cost	**52**	**129**	**181**	81	171	252

21. Related party transactions

Trading transactions

During the period NNL entered into the following transactions with related parties as follows:

	2017	2016	2017	2016	2017	2016	2017	2016
	Sales of goods / services		Amounts owed by related parties		Purchases of goods/services		Amounts owed to related parties	
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
BEIS	272	2,343	-	908	85	50	821	-
MOD	45	178	30	-	-	-	-	-
NDA	4,343	5,349	1,497	4,655	-	-	-	-
Sellafield	45,718	50,058	23,690	123	3,725	4,617	-	371
Total	**50,378**	57,928	**25,217**	5,686	**3,810**	4,667	**821**	371

Undertakings under common control of the Government are the Department for Business, Energy and Industrial Strategy (BEIS), Ministry of Defence (MOD), Nuclear Decommissioning Authority (NDA) and Sellafield Limited.

Since the financial year ended 31 March 2017 some of the amounts owed by related parties have been settled by cash but a balance of £1,509,427 remains and is now overdue. The Directors are confident that the balance will be collected and therefore do not believe a provision is required.

22. Controlling party

All of the share capital of NNL is owned by its parent, NNL Holdings Limited. NNL Holdings Limited country of incorporation is England and Wales with a registered address of 6th Floor, 1 Victoria Street, London. SW1H 0ET. The results of NNL are consolidated in the group financial statements of NNL Holdings Limited which are publicly available.

The entire issued share capital of NNL Holdings Limited is owned by the Secretary of State for Business, Energy and Industrial Strategy. In the Directors' opinion, NNL's ultimate controlling party is Her Majesty's Government.

NATIONAL NUCLEAR
LABORATORY

National Nuclear Laboratory
5th Floor,
Chadwick House,
Warrington Road,
Birchwood Park,
Warrington,
WA3 6AE

+44 (0)1925 289800
customers@nnl.co.uk

www.nnl.co.uk