

Natural Environment Research Council

Annual Report

& Accounts 2013-2014

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2013-2014

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Contents

The science of our changing world	4
The year in review	5
Delivering the strategy	10
Management commentary	30
Annual accounts	33

Some research reported here may not yet have been peer-reviewed or published.
For a list of NERC Council members see page 39. For members of our other
committees go to www.nerc.ac.uk.

The science of our changing world

The Natural Environment Research Council (NERC) is the leading funder of environmental science in the UK. We invest public money in cutting-edge research, postgraduate training and innovation in universities and research centres. Our scientists study and monitor the physical, chemical and biological processes on which our planet and life itself depends – from pole to pole, from the deep Earth and oceans to the atmosphere and space.

We address and respond to critical issues such as how we can benefit from natural resources, build resilience to environmental hazards and manage environmental change. Through collaboration with other science disciplines, with UK business and with policymakers, we make sure our knowledge and skills help the UK deliver innovation and growth with responsible environmental management.

NERC strategic goals

To fund excellent, peer-reviewed environmental science that helps us:

- understand and predict how our planet works
- manage our environment responsibly as we pursue new ways of living, doing business, escaping poverty and growing economies.

With our researchers and stakeholders, we develop the priorities that provide a focus for the environmental science community. Our research is often multidisciplinary and designed and delivered in collaboration with national and international partners.

NERC runs a fleet of research ships and scientific aircraft. We have bases in some of the world's most hostile environments and we invest in satellite technology to monitor environmental change on a global scale.

NERC is committed to developing UK and international capability across the environmental sciences. We fund centres and universities to carry out research and to train and support a world-class community of environmental scientists.

NERC has six major environmental research centres

BAS – British Antarctic Survey

BGS – British Geological Survey

CEH – Centre for Ecology & Hydrology

NOC – National Oceanography Centre

NCAS – National Centre for Atmospheric Science

NCEO – National Centre for Earth Observation

Where their names appear in this report, they have been abbreviated.



The year in review

NERC's new strategy *The Business of the Environment*, published in November 2013, reinforces our commitment to fund excellent science that helps the UK deliver innovation and growth with responsible environmental management.

Our strategy affirms NERC's role in a world that has changed enormously since the Council was created in 1965. We no longer live in a natural world – there is virtually no part of the environment that humans have left unchanged.

NERC's role is not simply to support science that observes and learns about natural processes that occur independently of us – we must also understand our own influence on the planet: what happens when systems that have evolved over hundreds of thousands or millions of years have to adapt to an environment that humans are rapidly and irrevocably altering.

Our vision is to place environmental science at the heart of responsible management of our planet.

Broadening our partnerships

We are building partnerships that bring together the business, policy, third-sector and research communities, to translate our science and skills to address economic and societal challenges.

Over the last 12 months there has been growing commitment from agri-food businesses to our Sustainable Agriculture Research and Innovation Club (SARIC), run jointly with BBSRC. SARIC will support precompetitive research that is both scientifically excellent and relevant



to industry, and will translate existing research into tools, products and services that benefit the sector.

We are developing strategic partnerships across a range of users, to help them access the science and expertise they need to address their environmental challenges. In the last financial year we signed memoranda of understanding with two new partners, Arup and Shell. These partnerships also help NERC understand business challenges and identify where research and training can contribute.

In 2013 we launched our £100-million investment in 15 doctoral training partnerships (DTPs) that will provide world-leading training across the full spectrum of environmental sciences for at least 1200 PhD students in the UK. These collaborations involve 38 higher education institutions and 280 businesses, policymakers, and public and third-sector organisations. DTPs will give NERC students access to cutting-edge research facilities and opportunities to work alongside international experts, work directly with employers, and to take part in world-leading programmes of technical and transferable-skills training.

We also created the first in a suite of new centres for doctoral training (CDT). These will provide strategically targeted PhD training that addresses research and skills gaps identified by NERC and our partners. This first CDT will focus on environmental science expertise for the oil and gas industries, and by doing so create highly skilled people for the wider energy and environment sectors. The funding provided by NERC

will be matched by industrial and other partners to create more than 60 studentships.

Innovative strategic research models

Our strategic research focuses on three challenges: helping society benefit from natural resources, building resilience to environmental hazards and managing environmental change. To meet these challenges we need to work with the whole research community.

To that end we have redesigned our model for strategic research funding, so that environmental researchers, research users and our funding partners can work with us to identify priority research areas, topics and partnerships.

Decisions to allocate funding to a new strategic research priority will be made through one of three routes – Joint Strategic Response, Strategic Programme Areas or Highlight Topics. The pathway used will depend on considerations such as the nature of the research challenge, its scale, complexity, opportunities for partnership, and timeliness.

This approach enables us to respond flexibly to changing research priorities and societal challenges, and to ensure that the application and impact of our research is built into its design.

Investing in world-class research infrastructure

The official naming of the new RRS *Discovery* in November marked the final stages of a £75-million project which delivered the world's most advanced research vessel on time and in budget. It also heralded a new generation of marine science – an area in which NERC has world-leading expertise.

During 2013 we made significant capital investments in new technologies to support research and innovation across the



environmental sciences. These include a new Autonomy Innovation Hub to be built at NOC in Southampton, due for completion in 2015. We have also committed £2.9 million to create marine robots for research and commercial use. NOC continues to engage widely with industry, government departments, UK Trade and Industry, Technology Strategy Board and others to leverage the investment in marine autonomous systems.

The UK has a long history of excellent airborne atmospheric research. The BAe146 atmospheric research aircraft, operated by NCAS in partnership with the Met Office, plays a key role in sustaining this world-leading position. It also provides emergency response to events such as the 2010 eruption of Eyjafjallajökull and the 2012 Elgin North Sea gas platform leak. The aircraft has become increasingly important to NERC strategy over the eight years during which it was leased from BAE. Now with £9.5 million of capital funding from BIS, NERC has bought the aircraft outright, so we can ensure it is available whenever it is needed and further develop the capabilities of the Facility for Airborne Atmospheric Measurements.

In 2013-14 we also invested £4.6 million in 24 projects that will strengthen the UK's capabilities in Big Data. Environmental science generates large and complex datasets, access to which has the potential not just to transform research but to increase productivity and innovation across the public and private sectors. This funding will help the UK grasp these opportunities.

Strategic funding, world-leading science

We are committed to reviewing our structure and processes to ensure we continue to fund excellent science in the most efficient way. As part of this we are considering whether giving independent status to four of our research centres – BGS, CEH, NOC and NCAS – would enable



NERC to focus more effectively on its role as a research funder while giving the centres the flexibility they need to make the most of the opportunities available to them. Council will make a decision after careful consideration of alternative ownership and governance models, and discussion with government and wider stakeholders.

We have also changed our peer-review processes, to strengthen and streamline the assessment of grants and increase the scientific community's confidence in how funding is awarded. These changes will make peer review more consistent and transparent in identifying the very best research proposals; they include a move to have more established academics and grant-holders in the Peer Review College.

Benefiting from natural resources

NERC-funded research remains at the forefront of international science. The latest BIS-commissioned report on International Comparative Performance of the UK Research Base showed that UK environmental science ranks first in the world in citation impact, and now outperforms all other UK research fields by the same metric.

But the work we support is not only scientifically excellent; it also helps meet key challenges facing society. Food is one of our most vital natural resources, and our researchers are helping increase yields while making agriculture more sustainable. For example, the fate of insect pollinators is a central question for food security, and NERC sponsors large amounts of research on the subject, often in collaboration with BBSRC and Defra through the joint Insect Pollinators Initiative.

NERC-funded research recently demonstrated that two diseases which have plagued domesticated bees

for years have now spread to wild bees across Britain, threatening the crop-pollination services they provide to farmers – which are increasingly thought to be an important complement to the work of domesticated honeybees. Other NERC-supported research has illuminated the effects of controversial neonicotinoid pesticides on honeybees.

A NERC-funded PhD studentship suggested we may soon be able to draw on plants' natural defences to protect them from pests. Plants use underground fungal networks to warn each other of aphid attack, letting them prepare their chemical defences before the pests arrive. If we can learn to use similar communication channels to activate these defences, we will improve crop yields while reducing pesticide use and the environmental problems it causes.

Many of the scientists NERC supports work directly with the energy industry, or do research that directly benefits it. BGS, for example, has provided estimates of UK shale gas resources and independent advice on managing the environmental impact of shale gas exploration, which helps policymakers and regulators ensure the UK industry develops safely and responsibly.

Resilience to environmental hazards

During the widespread flooding of early 2014, CEH researchers collaborated with bodies including local authorities, the Environment Agency and the Met Office, supplying hydrological expertise to help plan and coordinate responses to flooding and direct resources where they were needed most.

Beyond responding to immediate crises, CEH continues to work to improve the UK's long-term resilience to flooding and drought. In November 2013 it launched its new



Dore Crivell



Hydrological Outlook UK, which makes long-term forecasts of UK hydrology freely available to decision-makers. These bring together data from many different sources with hydrological models and long-range weather outlooks; the service is the result of close cooperation between CEH, BGS, the EA and the Met Office.

NERC investment supports the development of cutting-edge satellite technology to monitor important environmental issues. Launched in late 2013, the European Space Agency's Swarm satellite mission will provide immediate benefits in areas such as smartphone maps, and will help protect vital communications and navigation infrastructure from space weather by improving our understanding of how the Earth's magnetic field interacts with the Sun. Scientists at BGS and NCEO are involved in the project.

BGS researchers have also helped shed light on the causes of the tsunami that killed up to 20,000 people and caused widespread devastation when it hit Japan in 2011. An international study, whose results were announced at the American Geophysical Union's Fall Meeting late last year, found that a giant undersea landslide added significantly to the effects of the magnitude-9 earthquake in producing the large waves that struck Japan. Their findings suggest that current predictions may badly underestimate the size of certain tsunamis by ignoring the effects of underwater landslides, and will be vital in building the next generation of tsunami early-warning systems.

Managing environmental change

UK environmental scientists are making a major contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, the first part of which appeared last year. More than 10 per cent of its authors are from the UK, and many of these are NERC-funded.

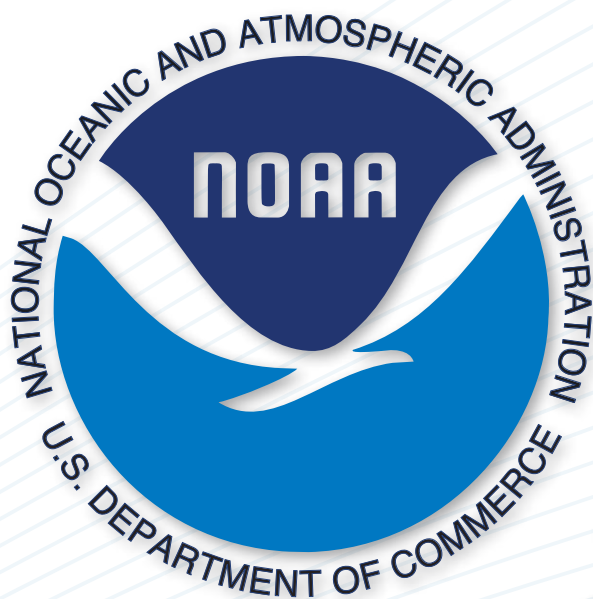
The UK's groundbreaking climate research is improving predictions of the effects of climate change over the coming century, helping governments and business make better decisions on long-term planning and resource allocation.

A NERC-supported study, including contributions from BAS researchers, has confirmed earlier discoveries that the Pine Island Glacier, the single largest contributor to sea-level rise in Antarctica, has started a process of retreat that may well prove irreversible and that could add between 3.5mm and 5mm to sea levels in the next 20 years.

Other work showed that the speed of a glacier's retreat, and therefore its contribution to sea-level rise, depends on its shape and the topography of the landscape it flows over. NERC-funded scientists took part in an international investigation of four of Greenland's largest glaciers; their results showed some glaciers may be set to retreat more slowly than previously estimated based on their historical activity, while other glaciers are likely to accelerate faster than expected. Under a mid-range scenario for climate change, with global temperatures rising 2.8°C by the end of the century, the four glaciers studied are likely to contribute up to three centimetres to sea levels.

Meanwhile researchers have demonstrated that climate change caused by human emissions is likely to double the frequency of extreme El Niño events to around one a decade. This will cause major disruption to global rainfall patterns, with serious consequences such as changes in flooding, wildfire and drought. The last such event in 1997-8 brought devastating floods and droughts to every continent and created an upsurge in tropical cyclones; it claimed an estimated 23,000 lives and caused \$35-45 billion (£20-27 billion) in damage.





An international partner of choice

Our world-leading environmental science and international networks make us a sought-after partner for research funding agencies and scientists in 80 nations. Together we agree international research priorities and share resources to tackle them.

One such partnership saw NERC join forces with the US's National Science Foundation (NSF) and the National Oceanic & Atmospheric Administration (NOAA) to fund two projects worth around £44 million (\$70m), which will use innovative technology to improve long-term climate predictions and weather forecasts. One of these, OSNAP (Overturning in the Subpolar North Atlantic Program), will run for five years and involve scientists from seven countries. An array of moored instruments and autonomous gliders will monitor and record ocean temperatures, salinity and currents across the North Atlantic subpolar gyre – an area that shapes global climate, not least the weather in the UK.

Pooling resources in this way is critical for providing governments and businesses with the knowledge they need to address the challenges and opportunities of managing complex environmental issues.

Finally, I would like to thank Ed Wallis, our outgoing Chairman, for his leadership and guidance of NERC, and to welcome Sir Anthony Cleaver who became our new Chairman at the start of 2014. I look forward to working with him; his business acumen and wide-ranging experience will be a great asset to NERC.

Duncan Wingham
Chief Executive
9 June 2014

Sir Anthony Cleaver
Chairman

Delivering the strategy

NERC regularly monitors, evaluates and reports on progress against delivery of our strategy, to inform our decision-making and to demonstrate that we are effectively and efficiently investing public funds to make economic, political and social contributions both in the UK and internationally.

Our planning and performance documents can be found at www.nerc.ac.uk/about/performance/reporting/reports

Developments during the year

Overview

Our Delivery Plan for the period 2011-2015 identifies five actions and a number of financial targets and priorities, and we made good progress towards these in 2013-14. Highlights and significant outputs are described below, starting with NERC's new strategy. There have been some minor deviations from these priorities which relate to: a delay in the delivery of RRS *Discovery* as trials slipped behind schedule due to marginal sea conditions; and a slight delay in the merger of BAS and ARSF aircraft facilities. However, these off-track objectives have mitigation plans in place to deliver the desired outcomes.

NERC's new strategy

In November 2013 NERC launched its new corporate strategy, *The Business of the Environment*, at a high-profile event attended by David Willetts and members of the business and government user communities. NERC engaged with researchers and business users to develop new priorities and key messages, and the new strategic direction recognises the value of long-term and discovery science whilst addressing three priority challenges facing society: access to natural resources, resilience to environmental hazards, and managing environmental change. At its heart, the new strategy clearly conveys NERC's aim to fund excellent, peer-reviewed science, foster UK and international partnerships to address the challenges and opportunities of managing the environment, and to make sure the knowledge we generate can drive UK innovation, economic growth and societal wellbeing.



The business of the environment

NERC's strategic direction, *The Business of the Environment*, sets out how NERC, in partnership with others, will respond to the environmental challenges of the 21st century.

Our vision: To place environmental science at the heart of responsible management of our planet.

Our goals: To fund excellent, peer-reviewed environmental science that helps us:

- understand and predict how our planet works
- manage our environment responsibly as we pursue new ways of living, doing business, escaping poverty and growing economies.

Making it happen: We will foster UK and international partnerships so business, government, civil society and scientists can work together to:

- address the environmental management opportunities and challenges we face
- co-design and co-deliver new environmental science
- find and apply existing scientific knowledge
- drive UK innovation, economic growth and societal wellbeing.

Delivery Plan Action: Increase focus on strategic research

Research programme highlights 2013-14

Research programmes provide strategically directed environmental research, training and related knowledge exchange, whilst encouraging national and international collaboration. Research programme highlights for 2013-14 include:

The Greenhouse Gas Emissions and Feedbacks programme aims to quantify the sources and sinks of greenhouse gases (GHGs) to better estimate the influence of man-made GHGs on recent and future climate change. New instrumentation to complement and enhance the UK's existing GHG observation network has been tested and is now operational, providing better coverage at key locations. The first field campaigns will use ground-based, airborne and ship-borne measurements to investigate fluxes between the land, ocean and atmosphere. The new datasets and model improvements will improve our understanding of the drivers and feedbacks affecting GHGs and help DECC and the devolved administrations to quantify the impact of possible interventions and monitor whether they are meeting statutory emissions targets, as well as improving climate predictions.

www.greenhouse-gases.org.uk

NERC has announced a call for proposals for the Environmental Microbiology and Human Health programme. The Defence Science and Technology Laboratory has offered to co-fund research into advanced identification techniques for bioaerosols while the Food Standards Agency and Defra will support studies to improve the detection of aquatic pathogens and allergenic microorganisms. This will help address the shortcomings of current molecular methods and overcome the problem of counting non-viable organisms through culture methods. The research will help to improve tools and models designed to support and protect public health.

www.nerc.ac.uk/research/funded/programmes/emhh/

The FASTNEt consortium was set up to use new observation and modelling techniques that would better characterise seasonal, annual and regional variations in the exchange of water and nutrients between deep oceans and shelf seas, recognising that the latter are a critical link between the carbon stored on land, in the atmosphere and in the oceans. Glider deployments have been integral to the success of the FASTNEt field programme and

have provided the first reliable description of turbulence measurements from glider technologies, enabling the global community to make more cost-effective long-term turbulence measurements in a range of environments and weather conditions.

www.bodc.ac.uk/projects/uk/fastnet/introduction/

RCUK programmes

To ensure the UK's science research base is well placed to address tomorrow's societal and economic challenges, it is vital that we work in partnership as part of RCUK to foster cross-disciplinary research and nurture national capability. New approaches are needed to solve many of the big research challenges over the next 10-20 years. To achieve this, NERC either leads or has an interest in four cross-council research programmes: Living With Environmental Change (LWEC), Energy, Global Food Security and Global Uncertainties. All work in these areas is being done in partnership with other research councils and government bodies, with increasing input from the private sector.

LWEC coordinated and published the first UK Flood and Coastal Erosion Risk Management Research Strategy and autumn 2013 saw the launch of a new flood network, bringing together professionals from industry, universities, public bodies and NGOs into a single community. This follows several million pounds of new investment in research programmes by NERC and EPSRC in collaboration with the Environment Agency and the Met Office. A key proposal to measure the health effects of flooding (including mental-health effects) is being prepared around a cohort approach to flooded communities.

www.lwec.org.uk/sites/default/files/UK%20Flood%20Research%20Strategy.pdf



Environment Agency



The RCUK Energy Programme has continued to deliver research that will help the UK to generate effective energy policies. The UK Energy Research Centre (UKERC), funded through NERC, has undertaken work on public values, attitudes and acceptability in transforming the UK energy system and in particular towards nuclear power as a solution to carbon-intensive energy production following the Fukushima accident. A strong emphasis has also been placed on addressing what motivates homeowners to renovate their homes with efficiency measures to help service-providers, local authorities and other agencies improve the take-up of these.

NERC's contribution to food-security research was strengthened this year by several calls aligned to the Global Food Security programme. The NERC-led, five-year, £8-million Soil Security Research Programme was launched in partnership with BBSRC, the Scottish government and Defra, and aims to secure future soil quality to sustain ecosystems and the services they deliver to people. The Belmont Forum – representing the world's major and emerging funders of global environmental change research and international science councils – launched a Food Security and Land Use call as part of the Joint Research Programme Initiative on Agriculture, Food Security and Climate Change. The BBSRC-NERC Soil and Rhizosphere Interactions for Sustainable Agri-ecosystems was also launched.

As part of the Global Uncertainties programme, NERC has funded scientists to address business, policy and societal problems that have arisen through the increasing number of businesses and communities being affected by natural hazards, such as extreme weather events, floods and

earthquakes. The NERC Innovation Team has allocated £0.5 million through the Probability, Uncertainty and Risk in the Environment initiative to 20 projects that will produce robust risk assessments to enable decision-makers to take action to manage risk. For example, University College London is working with RMS, a large catastrophe modelling company, to develop clearer estimates of uncertainty in the distribution of damage from future hurricanes.

International

NERC has strengthened its partnerships with emerging economies to co-fund research into significant environmental and socio-economic challenges and is actively seeking new opportunities for further collaborations.

NERC's partnership with the São Paulo Research Foundation (FAPESP) goes from strength to strength. This year saw the launch of the Human-Modified Tropical Forests programme, a £9.6-million investment that will see UK scientists working with leading international scientists in the Brazilian forests. We are also exploring opportunities to collaborate with FAPESP on research into the security of mineral supplies. As global population grows and conventional mineral supplies run out, there is increasing demand for rare earth elements which are crucial for the development of new low-carbon and energy efficient technologies. However, this drive for new minerals is raising environmental concerns over the sustainability of resource extraction and consumption. NERC is proposing collaborative, interdisciplinary research that will focus on the science needed to sustain the security of supply of strategic minerals in a changing environment.

The ongoing partnership with the Indian Ministry of Earth Science is supporting research into the drivers of variability in the South Asian monsoon and is exploring opportunities to collaborate to investigate the effect of pollution on human health in Indian megacities. NERC is also in discussions with the Chinese National Science Foundation to collaborate on a similar programme in China.

Delivery Plan Action: Increase economic impact and societal benefit

Informing shale gas potential and safety

NERC scientists advise on the safe environmental management of shale gas exploration. BGS provided scientific advice on the hazard from induced earthquakes

to a report by the Royal Society and Royal Academy of Engineering on the risks associated with hydraulic fracturing (fracking) during shale gas exploration and production. In 2012, BGS co-authored a report for DECC, which adopted the recommendations in their regulatory framework for future shale gas operations. NERC research also provides a baseline for the level of methane in groundwater, so the impact of shale gas operations can be monitored and assessed.

Smarter regulation reducing the cost of wind turbines

The BIS 2012 Industrial Strategy estimates that UK renewable energy is set to grow by 6-7 per cent per year to 2015 and identifies the offshore wind sector as a government priority. The Offshore Valuation Group estimated in 2010 that if only 13 per cent of the UK's offshore electricity potential were harnessed, by 2050 this could result in £28 billion of revenue to the UK each year and supply 50 per cent of our energy needs. Regulators need to know that offshore wind farms pose little risk to already eroding coasts and protected habitats. Scientists at NOC, funded by Defra, found that a wind farm at Scroby Sands in Norfolk did not alter wave patterns or exacerbate coastal erosion. Their recommendations led Defra to relax environmental monitoring requirements for developers, who no longer need to install expensive wave monitoring at wind farms. Hence NERC science saves £100,000 per wind farm – totalling £3 million for the 29 developments



already installed or under construction in rounds 1 and 2 of the Crown Estate leasing – and helps to unlock planning permission for further wind farms.

Reducing the costs of flooding

NERC data and risk models are used by government and local authorities to predict floods and plan major infrastructure investments – saving lives and minimising disruption for people, businesses and the economy.

NERC scientists at BGS, CEH and NOC have analysed UK sea levels, tides, storm surges and river flows for more than 50 years. Their expert advice informed the Thames Estuary 2100 Project and showed that existing flood defences provide more protection to London than originally anticipated. This meant that billions of pounds of investment in upgraded flood defences in the Thames Estuary area could be safely delayed until 2035, and that significant new investment is unlikely to be needed until 2070.

The same centres provide expert advice to government through SAGE and COBRA on emergency response to natural hazards. In February 2014, CEH and the Met Office jointly published a report on the causes and impacts of the winter 2013-14 flooding in the UK. CEH also leads the partnership in delivering the UK Hydrological Outlook, which provides government and business with an insight into future hydrological conditions across the UK. Monitoring data is used to describe likely trajectories for river flows and groundwater levels on a monthly basis, with particular focus on the following three months.

www.hydoutuk.net/

Delivery Plan Action: Attract and retain top talent for the UK

Doctoral Training Partnerships

NERC continues to implement its new strategic approach to support postgraduate training and attract top applicants. In November 2013, David Willetts announced £100 million of new NERC investment in 15 Doctoral Training Partnerships (DTPs), which specialise in training environmental science PhD students. The 15 partnerships will support at least 240 new students every year for the next five years and partners have the opportunity to co-fund and boost the number of studentships available. The partnerships include collaborations between 38 UK higher education institutions and 280 partner organisations, including businesses, policymakers, and public and third sector organisations.

Delivery Plan Action: Transform national capability

RRS Discovery

The newest addition to the UK's fleet of research vessels, RRS *Discovery*, had her naming ceremony in October 2013. Costing £75 million, she contains 400m² of permanent lab space with state-of-the-art scientific equipment and facilities to keep 28 scientists and 24 crew comfortable at sea for up to 50 days at a time. RRS *Discovery* will support world-leading marine research everywhere from tropical seas to polar oceans. The RRS *Discovery* replacement project was completed on time and on budget and was noted by BIS as exemplary. The ship has enhanced the UK's marine national capability, enabling research into physical, biological and chemical oceanography, marine geoscience, ocean engineering and atmospheric science.

New centre with Heriot-Watt

BGS and Heriot-Watt University are creating a new centre for earth and marine science and technology. Jointly funded by NERC, Scottish Funding Council and Heriot-Watt University, and based in Edinburgh, the Sir Charles Lyell Centre will be one of Europe's leading centres for innovative research at the core of geoscience, marine ecology, computing, mathematics and engineering. It will create a world-leading research cluster, bringing science and technology together to tackle the major issues of natural resource and energy supply. The new fusion of pure and applied expertise between Heriot-Watt and BGS allows use of innovative methods to create real-world solutions in areas including global change and ecosystems, seafloor-mapping using advanced robotic vehicles, earthquake and volcano risk monitoring, and energy security. The new centre will collaborate with and leverage existing NERC investments and innovations at NOC.

Delivery Plan Action: Resources to front-line science

Grants harmonisation

NERC has been working across RCUK to seek common and simplified funding processes. The cross-council funding agreement has been reviewed and was relaunched in November 2013. Alignments and improvements to the transparency of peer review have also been established.

Studentship harmonisation

NERC led the development of a harmonised set of terms and conditions for research training grants, with

an associated training grant guide, which came into effect for all new training grants from 1 February 2014 across the seven research councils. These aim to provide clarity and consistency for research organisations. We have also worked with Research Councils UK to develop a statement of expectations for doctoral training which lays out common principles for the support of all research council students, a joint vision for collaborative training and a common terminology for our four different approaches to training.

Estates merger with BBSRC

NERC recognises the benefits of working more closely with other research councils to deliver some services. It enables us to share expertise and best practice whilst increasing capability and resilience. From March 2014, the management of NERC's corporate estates function was incorporated into a joint team with BBSRC to serve the needs of both councils. This new arrangement offers a more resilient service for NERC and its research centres from a staff base that in time will be able to offer more flexibility than previously. The estates merger will generate cost reductions in the order of 10 per cent in the first year without the loss of any jobs and will enhance the variety of opportunities available for staff.

Summary of evaluations and outputs

Evaluation in NERC is a retrospective assessment of performance, used to manage progress in delivering our strategy, inform decision-making, and identify evidence of achievements. Three evaluations took place or began in 2013-14: an evaluation of NERC's centres; a strengths and weaknesses analysis of NERC's energy portfolio; and a mid-term evaluation of the multi-agency Ecosystem Services for Poverty Alleviation Programme, which is led by the Economic and Social Research Council.

The evaluation of NERC centres was conducted by two independent panels, which assessed the research excellence and the impact of BAS, BGS, CEH, NCAS and NOC. This is the first time NERC centres have been evaluated in this way. The evaluation was based on the Research Excellence Framework (REF) methodology, which is being used by HEFCE to assess UK higher education institutions (HEIs). The outcomes showed that the research carried out by centres is mainly excellent and includes some world-leading research. The majority of the research is comparable in quality to that of UK HEIs and at its best is competitive with the very best HEIs. Centres scored very highly for economic and societal impact; 77 per cent of case studies submitted were scored as having had either outstanding or very

considerable impacts in terms of reach and significance. All five centres were judged to provide an environment that is generally conducive to producing research and impact of internationally excellent or world-leading quality in terms of vitality and sustainability. The process and results can be viewed on our website:

www.nerc.ac.uk/about/perform/evaluation/evaluationreports/centrereports/

Another measure of the excellence and health of the research base is citation impact. The latest BIS study, www.gov.uk/government/uploads/system/uploads/attachment_data/file/263729/bis-13-1297-international-comparative-performance-of-the-UK-research-base-2013.pdf ranks UK environmental science first in the world by citation impact. It also found that environmental science leads all other UK research fields by the same measure, and that UK research in general punches well above its weight, with the highest productivity in the world per unit spent on research.

Two NERC centres also featured in the Nature Publishing Index published this year. BAS and NOC were ranked in the top 100 institutions for earth and environmental science based on their research papers published in Nature's 18 research journals between 2008 and 2011. www.nerc.ac.uk/press/releases/2013/13-top100/

Communications

NERC has restructured its communications team to reflect strategic priorities in promoting the wider application and impact of NERC science.

A major project this year has been the redesign and streamlining of our corporate website, which gives users a more intuitive experience and enables NERC to more effectively demonstrate the value of its science to the economy and society. High-level headings are now harmonised with other research councils.

We continue to generate daily news and blogs, weekly features, and fortnightly podcasts for our public-facing science news service, Planet Earth Online, leading to lively reader commentary. The site is unique among the research councils and received over 230,000 unique visitors in 2013. In response to feedback we have changed our podcast programme to ten-minute, fortnightly features.

Our interactive engagement with the academic community, the public and the media is reflected in our social media activity. Our Twitter accounts have more than 13,000 unique followers (up from 9,000 last year), Facebook likes

are up to c.3,300. We also have Pinterest, YouTube and Reddit accounts and are developing our LinkedIn profile, with page-views already up to c.600.

Our magazine, *Planet Earth*, remains popular and subscribers have grown by c.3,500 over the last 12 months, further increasing the magazine's importance for delivering NERC's commitment to make its science accessible to a broad, non-specialist audience.

We are successful in placing NERC science news into media outlets through traditional press releases as well as exclusives, Planet Earth Online news, and through Twitter. Key NERC stories were reported widely across the media in the UK and overseas this year including the *Telegraph*, *Guardian*, *The Independent*, *Daily Mail*, *New Scientist*, *Independent*, *ABC news*, *Wired*, *New Statesman*, *Forbes*, *NBC News*, *National Geographic*, *Discovery*, *Huffington Post* and *Vanity Fair*.

We have frequent TV and radio coverage, with NERC researchers appearing in programmes such as the BBC's *The One Show*, BBC Radio 4's *Inside Science*, BBC Radio 5 Live's *Richard Bacon Show*, Channel 4, BBC's *Newsnight*, BBC Radio 4's *Farming Today*, and ITN.

Support to researchers

Our 'Engaging the Public with Your Research' course has frequently been oversubscribed with a long waiting list, so we have increased the number of courses on offer this year. The course now also includes a session on using social media to promote research.

We also ran the second annual funding scheme to help course delegates develop public engagement resources. Examples from this year's round include:

- a 3D printed human skeleton on which people can interpret bioarchaeological clues – travel history, diseases and ageing
- primary school resources on social behaviour in mammals
- a stand for the Royal Horticultural Society's London Orchid Show addressing the trade in exotic and endangered species.

NERC also supported public engagement this year across the usual breadth of activity types and audiences, including:

- a stand at the Natural History Museum's 'Science Uncovered'
- videos of researchers at work, explaining the importance of the research and the realities of life as a researcher.

External funding

Funding from outside NERC meets the costs of commissioned and co-funded research carried out by NERC's centres for government departments, other public bodies, industry, the European Commission, and international and overseas organisations. This is a significant funding stream for many of NERC's centres and an important means of transferring knowledge to users.

Staff

NERC embraces diversity and equality. We have introduced a wide range of measures to ensure individuals can contribute their skills, knowledge and experience to the organisation while maintaining a work/life balance.

We actively encourage parents to return to work by providing flexible working arrangements. We continue to monitor all recruitment exercises to ensure demographically fair representation, and all promotion rounds are scrutinised for fairness.

In addition we promote personal development, embracing initiatives such as sabbaticals, secondments, further education and a range of short courses. By investing in individuals, we continue to foster potential across the organisation and ensure that NERC has the necessary skills, knowledge and experience to meet future challenges.

Information assurance and security

The government's Security Policy Framework requires departments to submit an annual report to Cabinet Office. NERC has put in place policies and procedures to minimise the risk of data loss, and reports annually on information security. In 2013-14 NERC agreed a number of information security recommendations in response to the information compromise in late 2012, and implementation of these recommendations is under way. Board-level awareness of cyber security risk was raised through a presentation to the NERC Audit and Risk Assurance Committee from The National Archives. Staff awareness of the new Government Classification Scheme has been raised through the rollout of mandatory training.

More information:

David Hyett, informationcompliance@nerc.ac.uk

Openness and transparency

NERC is subject to the Freedom of Information Act 2000 and also the Environmental Information Regulations 2004, which provide broadly similar access rights to the Act but relate specifically to information about the environment. We work with the other research councils to ensure a consistent approach to open-access legislation on key business activities. During 2013 we answered 50 requests for information specifically under the legislation. The requests covered a wide range of subjects, from business policy to research outputs. We answered all requests, some of which were complex and wide ranging, within the statutory time limit or within an agreed extension. Much of our information is readily available without making a specific Freedom of Information Act request. For details see our publication scheme at www.nerc.ac.uk/about/policy/foi/publication/

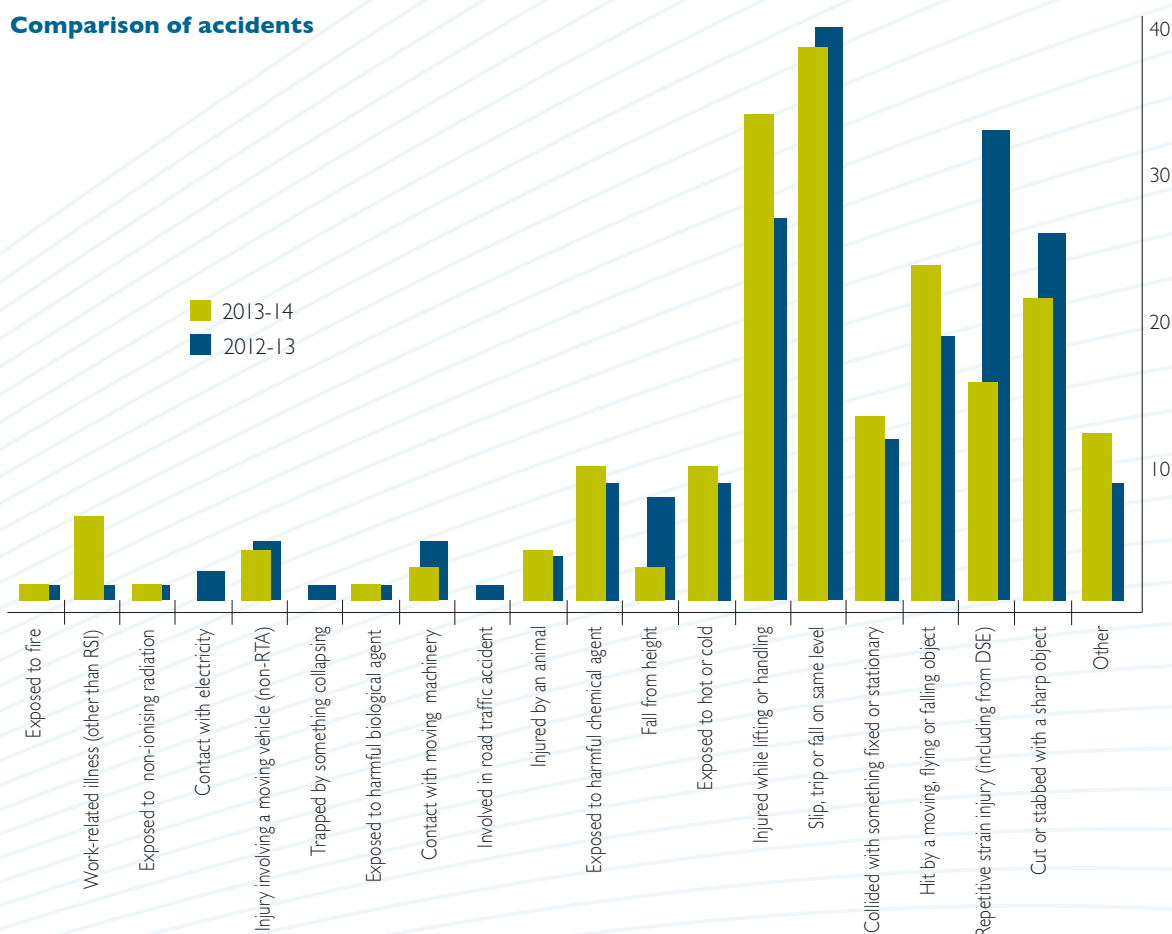
More information:

David Hyett, informationcompliance@nerc.ac.uk

Categories of requests made under the Freedom of Information Act/Environmental Information Regulations in 2013

Research policy and operation	17
Contracts	3
Business policy and operations	26
Research outputs	2
Funding applications	2
Personal information	0

Comparison of accidents



Health and safety

This report covers the financial year from 1 April 2013 to 31 March 2014. In this period there were two reportable occurrences to NERC staff under the Reporting of Injuries, Disease and Dangerous Occurrences Regulations. This compares with three reportable events to NERC staff in 2011-12, and is equal to the lowest recorded in the past 15 years.

In 2013-14, the total number of injuries and work-related ill-health reported by staff at NERC and those of its research institutes that follow NERC's safety management system was 168, compared to 201 the previous year. The number of incidents and near misses (in which no-one was injured) reported was 240, up from 194 in the previous financial year. Improved reporting of incidents and near misses as opposed to accidents in which staff were injured is considered a positive indicator and a ratio of 1:4 far exceeds our target of 1:1.

There were two occurrences reportable to the Marine Accident Investigation Branch under maritime law compared to none the previous year and an average of six a year over the previous three years. There were no occurrences outside the UK that would have been reportable had they occurred in the UK.

The total of 168 work-related injuries and ill-health cases reported across NERC and its research institutes includes 42 cases of musculoskeletal conditions (from lifting and handling and repetitive strain) compared to 58 the previous year. This is 25 per cent of all reported work-related injuries or ill health. The decrease is mainly due to a reduction in repetitive strain injuries from 32 to 13.

Sustainability report

Overview

NERC is the UK's leading public funder of environmental science. Our positive impact upon the sustainable use of the Earth's resources is enormous, and some examples of our impact can be found in the accompanying annual report.

NERC is committed to ensuring high standards of environmental management and ensures all operations are conducted with proper regard for the environment according to the environmental standards and legislation of the countries in which we operate. NERC is fully committed to maintaining and, where economically viable, improving the environmental performance of its operations consistent with delivering cutting edge research and innovation.

Summary of activity

During 2013-14 NERC has:

- installed two new energy-efficient gas boilers
- completed a waste water drainage upgrade
- upgraded an electrical system
- upgraded LED lighting.

Governance

The NERC Chief Operation Officer, Paul Fox, holds board level responsibility for environmental management. All NERC Research Centres have obtained ISO 14001 for Environmental Management and NERC is participating in the Carbon Reduction Commitment.

NERC recognises the need to improve its automatic recording and reporting of environmental impacts and has an action plan in place.

Greenhouse-gas emissions		2012-13	2013-14
Non-financial indicators (1,000 tCO ₂ e)	Gross emissions Scope 1 (direct) (fleet vehicles)	0.2	0.1
	Gross emissions Scope 2 & 3 (indirect) (utilities + all travel)	15.4	16.1
Total gross emissions		15.6	16.2
<i>Total net emissions (less green tariff)</i>		<i>12.7</i>	<i>14.1</i>
Related energy consumption (million kWh)	Electricity: non-renewable	18.1	17.3
	Electricity: renewable	0.1	0.1
	Gas	21.1	18.0
Total energy consumption		39.3	35.4
Financial indicators (£m)	Expenditure on energy	2.0	2.4
	Expenditure on official business travel (UK only)	2.0	2.3
PERFORMANCE COMMENTARY			
Energy consumption has fallen 10% compared with 2012-13. Most of our electricity and gas is used for heating and the reduced volumes are due to a milder 2013 winter.			
Overall greenhouse gas emissions remain unchanged due to an increase in travel, particularly overseas flights. This increase is related to business needs.			

Waste			2012-13 ¹	2013-14
Non-financial indicators (tonnes)	Hazardous waste		1	1
	Non-hazardous waste	Landfill	137.5	138
		Reused/recycled	343.5	364
		Incinerated without energy recovery	81	100
	Total waste volume		563	603
Financial indicators	Total disposal cost		205.9	233.5
PERFORMANCE COMMENTARY				
NERC has produced broadly the same amount of waste in 2013-14 as 2012-13. The slight increase in recycleable waste relates to the decommissioning, following relocation, of our Gilmerton Core Store.				

¹ 2012-13 figures have been restated to bring them onto the same basis as 2013-14

Finite resource consumption		2012-13	2013-14
Non-financial indicators (m³)	Water consumption – per FTE	18	20
	Water consumption – volume	45,800	47,152
Financial indicators (£k)	Water supply costs	123	146
PERFORMANCE COMMENTARY (INCLUDING MEASURES)			
Water usage has remaining broadly similar to last year.			

Science budget expenditure in research organisations

	Responsive awards			Knowledge exchange [#]	Research programmes			Research contracts	Total
	Fellowships	Grants	Students		Fellows	Grants	Students		
Aberystwyth University		419	58			76			552
Analytical Chemistry Trust Fund						3			3
Bangladesh University of Engineering and Technology						182			182
Bangor University	142	1,066	241			862		498	2,809
Basque Centre for Climate Change						57			57
Biotechnology & Biological Sciences Research Council						363		2,143	2,506
Birkbeck College		66				5			71
Bolivian Natura Foundation						46			46
Bournemouth University		18	68	20		37		0	142
British Trust For Ornithology						64			64
Brunel University		50	27	21					99
Cardiff University	72	1,167	233	119		813	37	0	2,440
Centre for Environment, Fisheries & Aquaculture Science						493			493
City University London		5							5
Conservation International Foundation						181			181
Consortium for Sustainable Development of the Andean Ecoregion						16			16
Council for Scientific and Industrial Research						14			14
Cranfield University			173	56		747	10	2,133	3,119
Daphne Jackson Trust		6						85	92
Department for Energy and Climate Change								50	50
Department for the Environment, Food and Rural Affairs						8		28	36
Diamond Light Source Ltd		6				1			7
Durham University	8	87							95
East China Normal University						4			4
Economic & Social Research Council						47		230	276
Edge Hill University College						18			18
Edinburgh Napier University			21			28			48
Engineering & Physical Sciences Research Council		89				23		4,025	4,137
Geological Survey of Ethiopia						17			17
Hawassa University						75			75
Heriot-Watt University	51	45	40	24		223		16	398
HR Wallingford Ltd						90		15	105
Imperial College London	625	1,616	713	147		5,129		773	9,004
Institute for European Environmental Policy						1			1
Institute of Development Studies		1				303			304
International Centre for Tropical Agriculture						193			193
International Food Policy Research Institute						39			39
International Institute for Environment and Development						32			32
International Livestock Research Institute						135			135
International Water Management Institute						116			116
Keele University		113	35			95		0	243
Kenyatta University						56			56
King's College London		146	149	103		459		325	1,182
Kingston University		34							34
Laboratory of Radioisotopes						82			82

	Responsive awards			Knowledge exchange [#]	Research programmes			Research contracts	Total
	Fellowships	Grants	Students		Fellows	Grants	Students		
Lancaster University		698	460	32		1,155	80	249	2,674
Lilongwe University of Agriculture and Natural Resources						10			10
Liverpool John Moores University			4						4
London School of Economics and Political Science			21			6		54	82
London School of Hygiene & Tropical Medicine		10	11		43	375			440
Loughborough University		176	32			267	19		494
Manchester Metropolitan University		32	41			5			77
Marine Biological Association	24	163				146		448	781
Medical Research Council								803	803
Met Office						38		800	838
MetaMeta						142			142
National Museums of Scotland		81							81
Natural History Museum		545	73			148		267	1,032
Nature Conservation Research Centre						170			170
North Wyke Research		84				246			330
Northumbria University		81	5			7			93
Overseas Development Institute						146			146
Plymouth Marine Laboratory		168	135	2		1,769	21	4,245	6,339
Queen Mary University of London	3	560	170	90		516		309	1,648
Queen's University Belfast	72	71				131			273
Rothamsted Research						14		5	19
Royal Botanic Garden Edinburgh		98		2					101
Royal Botanic Gardens Kew		150	45			110		0	306
Royal Holloway, University of London	64	369	229	60		137			859
Royal Society								50	50
Royal Veterinary College		104	11						116
Royal Society for the Protection of Birds						6			6
Scottish Association for Marine Science		514	220	19		936		2,050	3,740
Science & Technology Facilities Council			32	1		258		8,587	8,877
Scottish Universities Environment Research Centre		89	40	24		62		2,011	2,228
Sir Alister Hardy Foundation for Ocean Science		13		18		95		389	515
Skat Foundation								11	11
Smith Institute								89	89
Southern Agricultural Research Institute						198			198
Scotland's Rural College						35		15	50
St George's University of London						165			165
Stockholm University						183			183
Swansea University	74	207	123	18		432			854
Technology Strategy Board								963	963
The Carbon Foundation of East Africa						38			38
The James Hutton Institute						117			117
The Open University	305	808	208			83	21		1,425
UK Astronomy Technology Centre						138			138
Universita di Milano-Bicocca						71			71
University College London	476	2,153	504	158	29	1,402		369	5,091
University of Aberdeen	78	1,190	463	89		663			2,483
University of Abertay Dundee		3							3
University of Bath		204	62			190	20		477
University of Birmingham	194	907	404	34		1,215	20	317	3,091

Science budget expenditure in research organisations cont.

	Responsive awards			Knowledge exchange [#]	Research programmes			Research contracts	Total
	Fellowships	Grants	Students		Fellows	Grants	Students		
University of Bradford		17							17
University of Brighton		85	31	24				233	372
University of Bristol	642	4,031	1,013	357		1,476	54	1,676	9,250
University of Cambridge	240	2,212	747	188	39	1,580	15	296	5,316
University of Central Asia						38			38
University of Dundee		87	19			307	19	602	1,034
University of Durham	218	1,722	356	102		432		482	3,313
University of East Anglia	364	1,958	808	26		1,246	71	270	4,741
University of Edinburgh	631	2,534	1,010	177		2,530		3,045	9,928
University of Essex		237	153	93		315	10		808
University of Exeter	186	2,660	553	260		2,554		361	6,574
University of Glasgow	105	511	295	144		81	20	30	1,186
University of Hertfordshire			40	21		181			243
University of Hull	91	456	30			187			764
University of Kent	77		20	36		29			163
University of Leeds	586	4,483	1,332	460		1,248		7,898	16,008
University of Leicester		718	246	28		496	113	343	1,944
University of Lincoln	64					21			85
University of Liverpool	275	2,025	447	25		458		969	4,200
University of Malawi						84			84
University of Manchester	281	3,027	823	52		1,580		533	6,297
University of Newcastle Upon Tyne	107	615	318	56	10	587		40	1,734
University of Nottingham		525	87			68		211	890
University of Oxford	442	4,078	1,111	238		1,617	30	1,494	9,010
University of Plymouth		444	193	4		512	15		1,169
University of Portsmouth		192	21	43		427		186	869
University of Reading	346	1,695	811	120		2,964		5,256	11,192
University of Salford			21			18			38
University of Sheffield	306	1,952	647	172	135	884		528	4,623
University of Southampton	397	2,414	629			3,084	66	842	7,431
University of St Andrews	217	1,457	364	20		401	5	1,262	3,727
University of Stirling		250	115	20		148		0	533
University of Strathclyde	97	7	107			62	29	0	302
University of Surrey						101	19		120
University of Sussex		164	92	61		118			435
University of the Highlands and Islands				52					52
University of the West of England			5			38			43
University of the West of Scotland						10			10
University of Ulster		279				75		29	384
University of Warwick	107	661	210	38		14		120	1,151
University of York		1,017	386	59		1,108	76	485	3,131
Wageningen University						23			23
Weber State University						15			15
World Agroforestry Centre						110			110
Zoological Society of London		39	74			76			189
Grand Total	7,967	56,963	18,166	3,915	256	50,261	770	59,546	197,844

- includes grants, fellowships, students and research contracts

In addition to the above table, NERC Institutes have funded additional research awards and contracts totalling £4.296m.

All entries and totals show the amount awarded rounded to the nearest £k.

Grants, fellowships and studentships

We continue to monitor the success rates of grant and fellowship applications to ensure that we do not discriminate against any applicants. Trend data have shown that the proportion of women applying for research grants, and their subsequent success rate, remains relatively constant. However, the number of women in the system remains low.

Although there are yearly fluctuations, on average 50 per cent of studentships are awarded to females. The current PhD stock is 47 per cent female.

In recognition of NERC's own role in promoting and leading cultural change in relation to equality and diversity, in 2013-14 we introduced unconscious bias training to our funding mechanisms and we will continue to review the overall effectiveness of our approaches to funding.

Discovery science grant proposals and success rates

	2012-13	2013-14
Number of proposals	853	937
Number of grants	225	172
Total £k	61,634	54,875
% success rate	26.4	18.4

Success rates by gender

	Men	Women
Number of proposals	1,248	339
Number of grants	380	101
% success rate	30	30

Success rates for fellowships by gender

	Men	Women
Number of proposals	86	54
Number of grants	13	7
% success rate	15	13

Staff, students and fellows

	2011-12	2012-13	2013-14
Directly employed staff	2,509	2,365	2,604
Staff in research organisations ¹	1,932	1,762	2,747
Fellows	98	96	87
PhD ²	1,054	1,079	1,016

1. Headcount of all academic and research staff named on research grants that were active at the end of the financial year.
2. PhD data is based on number of students directly funded by NERC. These do not include co-funded studentships where another funder administers the award. PhD data are recast annually to include studentships that had not previously been entered into the system, by award holders, at the time of publication. The figures for 13-14 are lower than previous years; this reflects the delay between awards being made and students being entered into the system.

Grants awarded in 2013-14

	Research grants							
	Discovery science				Strategic research		Innovation	
	Standard grants		Large grants		Strategic research		Innovation	
	No.	Value £k	No.	Value £k	No.	Value £k	No.	Value £k
Aberystwyth University	2	820						
Bangor University	1	222	1	440	5	1467		
BC3 Basque Centre for Climate Change					1	73		
Birkbeck College	1	49						
Bolivian Natura Foundation					1	395		
Bournemouth University					1	150		
British Antarctic Survey	8	3291			5	1197	1	42
British Geological Survey	1	189			11	980	1	13
Brunel University								
Carbon Foundation of East Africa					1	88		
Cardiff University	2	773			1	25		
CEFAS					3	1068		
Centre for Ecology & Hydrology	1	422	1	255	13	5044		
CONDESAN					1	237		
Conservation International Foundation					1	464		
Council for Science & Industrial Research					1	101		
Cranfield University					4	998		
Diamond Light Source					1	11		
Edinburgh Napier University					1	210		
Falmouth University					1	394		
Geological Survey of Ethiopia					1	22		
H R Wallingford Ltd					1	158		
Harper Adams University					1	108		
Hawassa University					1	228		
Heriot-Watt University							1	65
Imperial College London	7	1918	1	535	4	2206		
Institute of Development Studies					1	13		
International Institute for Environment & Development					1	364		
International Water Management Institute					3	443		
International Food Policy Research Institute					1	238		
James Hutton Institute					1	472		
Keele University								
Kenyatta University					1	75		
King's College London	1	84			4	997		
Laboratory of Radioisotopes					1	181		
Lancaster University	1	270			4	1516		
Lilongwe University of Agriculture & Natural Resources					1	115		
London School of Hygiene & Tropical Medicine								
Loughborough University	2	436			1	406		
Manchester Metropolitan University								
Marine Biological Association								
Meta Meta					2	189		
National Oceanography Centre	4	703	1	1820	7	1611	2	123
Natural History Museum	1	299			2	439		
Nature Conservation Research Centre					1	684		
Newcastle University			1	332	8	1599		
Northumbria University								
Open University					2	407		
Overseas Development Institute					2	34		
Plymouth Marine Laboratory	1	190			6	3517		
Queen Mary, University of London	3	742			2	433		
Queen's University Belfast					3	806		
Royal Botanic Gardens Kew					3	207		
Royal Holloway, University of London	1	403						
Royal Veterinary College								
SAHFOS								

	Fellowships						Research studentships			
	Discovery science		Strategic research		Innovation		Responsive		Strategic research	
	Independent research fellowships		Strategic research fellowships		KE fellows		Doctoral training grants		Doctoral training grants	
	No.	Value £k	No.	Value £k	No.	Value £k	No.	Value £k	No.	Value £k
							1	364		
									1	81
			1	254			1	583		
							1	148	1	76
							1	222	1	77
					1	67	1	437		
							1	73	3	209
	1	518	1	10					1	75
	1	492	1	51			1	639	1	76
							1	73		
							1	240		
							1	294		
							1	80		
							1	73		
							1	73		
1		473					1	437		
			1	19			1	296	1	76
							1	73		
							1	146		
							1	146	2	148
							1	240		
							1	240	1	76
							1	80		
					1	108				

Grants awarded in 2013-14 cont.

	Research grants							
	Discovery science				Strategic research		Innovation	
	Standard grants		Large grants		Strategic research		Innovation	
	No.	Value £k	No.	Value £k	No.	Value £k	No.	Value £k
Scottish Association for Marine Science	1	74	1	653	7	1595		
Scottish Universities Environment Research Centre	1	136			2	479	1	48
Southern Agricultural Research Institute					1	315		
STFC – Laboratories					7	478		
Stockholm University					1	1207		
Swansea University	2	812						
University College London	2	643	1	325	6	1007	2	299
University of Aberdeen	1	477			7	2087	1	99
University of Bath	2	791			1	115		
University of Birmingham	7	2046			4	764		
University of Brighton	1	272						
University of Bristol	6	2268	4	1430	6	2031	3	386
University of Cambridge	3	1422	1	105	4	1494	1	202
University of Central Asia					1	227		
University of Dundee					2	127		
University of Durham	4	600	1	322	1	8	4	165
University of East Anglia	7	1864	1	40	4	1230	1	202
University of Edinburgh	4	1256			11	3447	3	155
University of Essex								
University of Exeter	8	3200			11	3455	2	293
University of Glasgow					2	90		
University of Hertfordshire							1	99
University of Highlands & Islands							1	81
University of Hull	4	953			2	281		
University of Kent					1	394		
University of Leeds	4	1794	1	818	6	1353	1	202
University of Leicester	2	649			2	233		
University of Liverpool	3	1109	2	744	4	840	1	94
University of Manchester	7	2583			4	947		
University of Milan-Bicocca					1	147		
University of Nottingham	2	543			1	394		
University of Oxford	5	1333	2	1470	9	4881	1	202
University of Plymouth	3	1068			2	203		
University of Portsmouth					3	835		
University of Reading	4	909	1	53	9	3469	1	202
University of Roehampton	1	52						
University of Salford					1	231		
University of Sheffield	9	1931			3	847		
University of Southampton	8	2520	1	233	18	2481	1	202
University of St Andrews	1	108					1	99
University of Stirling	1	124			2	479		
University of Strathclyde					2	264		
University of Surrey					2	93		
University of Sussex					2	321	1	77
University of the West of England					2	1374		
University of Warwick	2	1017			1	30		
University of West of Scotland					1	40		
University of York	4	1150			4	771		
Wageningen University					1	275		
Weber State University					1	94		
World Agroforestry Centre					1	147		
Zoological Society London Institute of Zoology	1	209						
Grand total	147	44722	21	9575	280	71951	32	3347

	Fellowships						Research studentships			
	Discovery science		Strategic research		Innovation		Responsive		Strategic research	
	Independent research fellowships		Strategic research fellowships		KE fellows		Doctoral training grants		Doctoral training grants	
	No.	Value £k	No.	Value £k	No.	Value £k	No.	Value £k	No.	Value £k
			1	13	1	95	1	223		
			1	17			1	219		
	1	541	2	227			1	399		
							1	291	1	77
			1	47			1	364	3	206
	2	986					1	952	1	73
	2	986	1	238			1	734	4	294
									2	145
	1	406					1	291		
							1	729	3	215
	2	922					1	802	1	71
							1	146	2	139
	1	570			1	99	1	437	2	140
							1	146		
			1	8					1	72
	2	881					2	1239	3	210
					1	86	1	219	1	69
							1	437	2	163
							1	666		
	2	1123					1	146		
			1	11			1	1171	2	147
			1	24			1	219		
							2	802	3	209
	1	644					1	437		
	1	391					1	656	4	286
	1	510					1	224		
							1	73		
							1	73	1	71
							1	73	2	147
	1	575					1	219	1	69
							1	291	1	74
									2	142
							1	80		
	20	10018	13	919	5	456	53	17711	54	3910

How we spent the science budget (£m)*

Research programmes

Aerosols & Clouds	0.978
African Groundwater (UpGro)	1.591
Algal Bioenergy Network	0.140
Analytical Science & Technology PhD Studentships	0.289
Arctic Programme	3.922
BioDIVERSA	0.123
Biodiversity & Ecosystem Service Sustainability	3.688
Changing Water Cycle	2.377
Coastal Sediment Systems	0.778
Earth System Modelling Strategy implementation	1.068
Ecology and Hydrology Funding Initiative	0.063
Ecosystem Services for Poverty Alleviation (ESPA)	1.329
Environment & Human Health	0.012
Environmental & Social Ecology of Human Infectious Diseases (ESEI)	0.808
Environmental Exposure & Health Initiative (EEHI)	1.074
Environmental Nanotechnology	0.789
Flooding from Intense Rainfall	0.579
Greenhouse Gas Emissions & Feedbacks	2.839
Human Modified Tropical Forests	0.880
Ice Sheet Stability	2.134
Increasing Resilience to Natural Hazards in Earthquake-prone & Volcanic Regions	0.786
Insect Pollinators Initiative	0.408
International Polar Year	0.009
Joint Weather & Climate Research Programme	0.283
Land Based Renewables	0.273
Long Term Co-evolution of Life & the Planet	1.205
Macronutrient Cycles	3.159
Managing RP Investments	0.397
Marine Ecosystems	0.150
Marine Renewable Energy	0.639
Mathematics and Informatics for 'omics	1.162
Mineral Resources	0.361
Minor Initiatives	0.167
Networks of Sensors	1.499
Next Generation unmanned aerial vehicles	1.319
Next Generation Weather & Climate Prediction	0.878
Ocean Acidification	1.275
Ocean Shelf-Edge Exchange	1.503
Probability, Uncertainty & Risk in the Environment	1.213
Radioactivity & the Environment	0.076
RAPIDWATCH	1.149
Resource Recovery from Waste	0.858
Shelf Sea Biogeochemistry	1.921
Soils Pump Priming	0.500
Storm Risk Mitigation through Improved Prediction & Impact Modelling	0.802
Sustainable Marine Bioresources	0.008
Technology Proof of Concept 2	0.037
Theme Leaders	0.602

UK Droughts	0.021
UK Integrated Ocean Drilling Programme Phase II	1.408
UK Integrated Ocean Drilling Programme Phase III	0.058
Understanding & Predicting the Ocean Surface Boundary Layer	0.679
Urban Atmospheric Science	0.014
Valuation Biodiversity & Natural Resources	0.099
Virtual Observatory	0.208
Other Research Programmes	0.163

Other programmes

Earth Observation Programmes	0.137
Living with Environmental Change	0.585
UK Environmental Observation Framework (UKEOF)	0.100
PGT Short Courses Contribution	1.230
Open Access	0.545
Isaac Newton Institute	0.400
NERC Big Data	8.510
NERC Strategic Capital	7.253
Knowledge Exchange	10.507

Research centres

Marine Biological Association	0.448
National Centre for Atmospheric Science	8.602
National Centre for Earth Observation	5.609
Plymouth Marine Laboratory	3.786
Scottish Association for Marine Science	1.716
Sea Mammal Research Unit	1.025
Sir Alister Hardy Foundation for Ocean Science	0.389

National capability – Swindon Office

Facility for Airborne Atmospheric Measurements	2.093
High Performance Computing	2.583
International Activities	2.084
IODP Subscription	2.501
Services and Facilities	8.258
Other National Capability Activities	0.115
Procurement of BAe 146 Aircraft	0.867
Cranfield University	2.000
Purchase of FAAM BAe 146 Aircraft	8.622
Capital Income	-0.300
National Capability Capital	0.206

Discovery science

Standard Grants	53.822
Large Grants	8.736
Small Grants	0.800
New Investigators	1.170
Antarctic Funding Initiative	1.921
Fellowships	8.145
Cross Council Awards	1.443

Postdoctoral training

Postdoctoral Training	19,460
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British Antarctic Survey

National Capability	34,101
Knowledge Exchange	1,031
Research Programmes	1,628
Administration Costs	0,920
RRS Ernest Shackleton	1,102
RRS James Clarke Ross life extension	0,920
Core Capital	6,816

British Geological Survey

National Capability	16,169
Knowledge Exchange	2,671
Research Programmes	0,814
Administration Costs	1,025
Core Capital	3,370

Centre for Ecology & Hydrology

National Capability	14,072
Knowledge Exchange	0,665
Research Programmes	1,237
Administration Costs	1,133
Cosmos Soil Project	1,267
Core Capital	2,445

CEH Transition and Integration	0,596
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National Oceanography Centre

National Capability	24,125
Knowledge Exchange	0,271
Research Programmes	1,771
Administration Costs	1,090
Slocum and Sea Gliders	2,236
Geophysics Seismic Equipment	0,944
Marine Sensors Labs	0,816
RRS Discovery Replacement ship	0,734
Core Capital	7,357
Capital Income	-0,150

Other infrastructure

Corporate Activities (including Swindon Office)	1,985
Swindon Office Administration Costs	9,524
Shared Services Centre Costs	5,933
Corporate Administration Income	-4,397
Corporate Capital	0,945

Corporate Restructuring	5,266
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Private Funding Initiative	-2,482
Depreciation	30,680
Amortisation	0,088
Impairments	1,521
Asset Disposals	-2,597

TOTAL NERC EXPENDITURE	403,760
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Comprises:	
Resource **	369,027
Capital	34,733

Capital Expenditure in italics

* This table shows how NERC has spent the BIS science allocation. All figures are net of other income received.

** Resource figure differs from the net expenditure for the year by £1.972m, which is broken down as follows:

	£m
Other funding received from BIS (recorded as financing – see Note 3)	6,017
Capital Income	-0,450
AME change in provisions	-3,595
	1,972

Professor Duncan Wingham

Chief Executive and Accounting Officer
9 June 2014

Management commentary

Statutory basis of financial statements

NERC's statutory financial statements have been prepared using accruals accounting in accordance with the UK government's Financial Reporting Manual (FRM) for 2013-14 and the accounts direction issued by the Secretary of State.

The government has published a report of the research council's triennial review which includes recommendations to strengthen the effectiveness and efficiency of the seven research councils working together. BIS and the research councils have agreed a plan to implement the triennial review recommendations, in line with wider strategic reform of BIS, from 2014-15, and the financial statements have thus been prepared on a going-concern basis.

Financial summary

NERC concludes the accounting period with a balanced financial position, within 0.1% of available budget, for both near cash and capital. There is a non-cash surplus of £5m. A comparison with the previous accounting period is shown in Table 1.

NERC has completed a significant investment in capital infrastructure during the year. Highlights include:

NERC assets

- The RRS *Discovery* coming into service (£71.1m)
- Purchase of the BAe 147 atmospheric research aircraft (£8.6m)

Community assets – funded via capital grants

- Big data infrastructure (£7.4m)
- Strategic capital equipment (£7.3m)
- Cranfield University research airfield infrastructure (£2.0m)

Reconciliation between NERC's outturn with its annual accounts for 2013-14 is shown in Table 2.

Statutory disclosures

In accordance with the Companies Act 2006, the following statutory disclosures are presented for the accounting period 2013-14:

Table 1. NERC outturn 2013-14 and 2012-13 comparison

NERC outturn	2013-14 £000	2012-13 £000
Science budget	408,858	376,001
Other BIS funding	6,017	120
Earned income	66,992	59,720
Total funding	481,867	435,841
Expenditure	476,770	442,161
Surplus/(Deficit)	5,097	(6,320)
Surplus/(Deficit) excluding non-cash	236	(312)
Variance (%)	1.1%	-1.5%
Variance (%) excluding non-cash	0.0%	-0.1%

Pensions

NERC's pension schemes are discussed in greater detail in Note 5d to the Annual Accounts.

Significant interests

Potentially relevant significant interests of NERC's Council members where they are affiliated to other organisations are presented at Table 2 in the Remuneration Report to the main accounts. No issues regarding conflict with their managerial responsibilities have materialised. NERC's Council Secretariat manages a register of interests:

www.nerc.ac.uk/about/work/boards/council/interests.asp

Auditors

NERC's accounts are audited by the Comptroller and Auditor General who has been appointed under statute and is responsible to Parliament. The cost of the audit was £80,000. No remuneration was paid to the external auditors in respect of non-audit work in 2013-14. Internal audit was provided independently by the Audit and Assurance Services Group (AASG). AASG reports annually to the Accounting Officer. The cost of internal audits undertaken during 2013-14 was £197,475. No remuneration was paid to the internal auditors in respect of non-audit work during 2013-14. The Accounting Officer has taken all reasonable steps to ensure that he is aware of any relevant

audit information and to ensure that the Council's auditors are aware of that information. As far as the Accounting Officer is aware, there is no relevant audit information of which the Council's auditors are unaware.

Sickness absence

NERC's sickness absence rate was 1.7% (2012-13: 2.3%), equivalent to 3.8 days per full-time employee (2012-13: 6.4 days).

Public sector information

NERC has complied with the cost allocation and charging requirements set out in HM Treasury and Public Sector

Information guidance, but is exempt from the requirements of The Re-use of Public Sector Information Regulations 2005.

Payment policy

NERC observes the Confederation of British Industry Code of Practice regarding prompt payment, and in accordance with the government direction, is committed to paying its suppliers within five days of the receipt of a valid invoice or earlier if suppliers' terms dictate. During 2013-14, 79% of payments were made within five working days (83% 2012-13) and 94% within 30 days (93% 2012-13). In accordance with the guidance of the Statutory Instrument 1997/571, creditor days for the period are 32 days (2012-13: 12 days).

Table 2. NERC Outturn and Annual Accounts Reconciliation 2013-14

	Resource £000	Capital £000	Total £000
Net expenditure ¹	371,000	-	371,000
AME change in provisions ²	3,595	-	3,595
Other BIS funding ³	(6,017)	-	(6,017)
Capital grants	(22,555)	22,555	-
Capital ⁴	-	37,780	37,780
Capital income	450	(450)	-
Net Profit on NBV and revaluation reserve disposals ⁵	-	(2,597)	(2,597)
Outturn	346,473	57,288	403,761
Science budget	351,558	57,300	408,858
Reported surplus ⁶	5,085	12	5,097

Notes:

1. Taken from the statement of net expenditure for the year ended 31 Mar 2014.
2. Provision, utilisation, movements, unwinding of discount and change in discount factor score as AME and are outside the scope of DEL; figures taken from note 8 Other operating costs (allowance for trade receivables) and note 14 Provisions.
3. Taken from note 3 grant-in aid and other BIS funding.
4. Taken from note 9(a) Property, plant and equipment, note 9(b) Assets under the course of construction and note 10 Intangible fixed assets – Additions.
5. In accordance with Financial Reporting Manual.
6. Resource surplus of £5,085k comprises £225k near-cash surplus and £4,860k non-cash surplus.

Forward look

New polar ship

NERC is starting the process for procuring a replacement for its ageing polar ships. BIS has announced more than £200 million for procuring a new polar flagship vessel, with the aim of first scientific deployment by 2019.

Business engagement

Over the next year, NERC will be implementing a more strategic approach to handling environmental data to enable us to make it more accessible and to work with businesses and the Technology Strategy Board to drive the development of innovative tools and solutions. We will continue to work with BBSRC to develop our work with businesses, for example initiating new activities in aquaculture, and we will be implementing a new innovation programme in risks to infrastructure.

Ownership and governance of NERC research centres

NERC is reviewing the relationship with three of its wholly-owned research centres (BGS, CEH and NOC) to clarify its role and thereby make it easier to align more effectively with other research councils and the wider BIS family. This will also improve the centres' roles as science delivery partners and provide an opportunity for them to develop outside of public sector constraints. NERC is also considering giving NCAS a similar independent identity. Council will make a detailed examination of the relative merits of present ownership arrangements and possible alternatives in October 2014, after which a period of

transition planning and implementation will be necessary; this period may differ in length for each centre.

Supporting international climate change negotiations

In collaboration with DECC and Defra, NERC has contributed to a new multi-disciplinary research programme led by the Met Office Hadley Centre. AVOID 2 aims to tackle knowledge gaps in six critical research areas which are directly relevant to policy discussions in the run-up to the UN Framework Convention on Climate Change COP21 (to be held in Paris in 2015). This research will also help interpret the implications of any new global agreement. AVOID 2 follows on from AVOID, which Ed Davey, Secretary of State for Energy and Climate Change, cited as an 'impressive demonstration of successful collaboration between academia and government... [delivering] concrete outcomes'.

NERC's 50th anniversary

2015 marks NERC's 50th anniversary. We will use this milestone to highlight the many benefits environmental science continues to bring to the economy and public wellbeing.

Professor Duncan Wingham

Chief Executive and Accounting Officer

9 June 2014



Accounts

Remuneration Report

Remuneration Policy

The Remuneration Committee is responsible for agreeing the pay and allowances of senior managers, i.e. directors (except for the Chief Executive, see below), the committee met once during 2013-14 on 11th July 2013. The Committee members are listed below:-

Mr Ed Wallis, Chairman NERC
Prof Paul Curran, Council Member
Prof Paul Monks, Council Member
Prof Duncan Wingham, Chief Executive
Mr Jonathan Bates, Director, People & Skills, who attends in an Advisory capacity.

The Remuneration Committee works in accordance with its policy on senior staff pay, which is designed to reward senior staff on the basis of individual skills, experience and performance set against the market median for their role. A market-related pay point is determined by survey evidence obtained from relevant comparator organisations in the public, higher education and voluntary sectors and is updated annually.

In accordance with NERC's appraisal system, performance is assessed against pre-set objectives for individual roles with input in the assessment process from individual reviewees, reviewers and the Chief Executive. In addition an assessment will be made of whether the performance and overall development in experience for the reporting year shows an increased and sustained exceptional contribution to NERC.

Performance will be rated according to whether certain characteristics have been exhibited; these include inter alia: achievements that have helped develop NERC's science/organisational impact, compliance with NERC Core Expectations, being integral to the delivery of NERC's mission, adding value to the organisation and adding distinction to NERC's science outputs. How well the individual exhibits these characteristics will determine the rating they receive.

These assessments will be used to determine both the pay increase and level of bonus that the member of senior staff will receive. In addition the survey evidence is factored into the pay increase assessment.

These arrangements were brought in to address the wide range of roles held by senior staff; to ensure that individual experience and performance were routinely included as factors in determining annual movement in base pay; and most critically to ensure a strong link between pay arrangements and the markets from which NERC recruits its senior staff.

From 1 April 2006 all pay movement for senior employees is performance related. Prior to that date only the non-consolidated element of senior pay was performance related.

It should be noted that no senior managers are on a service contract. No awards have been made to senior staff this year.

More information about the Remuneration Committee can be found at the following website
www.nerc.ac.uk/about/organisation/boards/

Employment Contracts

NERC staff are not civil servants but the organisation makes its appointments in accordance with the broad principles set out in the Civil Service Commissioners' Recruitment Code, which requires appointments to be on merit on the basis of fair and open competition but also includes the circumstances when appointments may otherwise be made.

All senior officers covered by this report, apart from the Chief Executive, hold appointments that are open-ended. All staff may retire after age 50 and draw their pensions on an actuarially reduced basis. Staff appointed before October 2006 may draw full pensions from age 60. Staff who leave during a formal redundancy exercise will be eligible for compensation terms, as defined under the rules of the Research Council's Superannuation Scheme. These payments are in line with those due under the Civil Service Compensation Scheme.

The notice period for all senior employees is three months.

Remuneration of the Chief Executive

Professor Wingham started his tenure on 1 January 2012. His initial contract is for a period of four years. Both the appointment terms and remuneration package are determined by the Department for Business, Innovation & Skills (BIS) with the Senior Review Oversight Committee (SORC) making a decision based on input from the Permanent Secretary and NERC Chair.

Professor Wingham's emoluments, including both taxable and non-taxable benefits, were £142,593 (2012-13: £130,000). This included:

	£
Basic salary	130,000
2011-12 performance pay non-consolidated rewards:	
Annual performance bonus	656
RCUK performance bonus	656
Appointment term bonus	1,531
2012-13 performance pay non-consolidated rewards:	
Annual performance bonus	2,250
RCUK performance bonus	2,250
Appointment term bonus	5,250
Total	142,593

The payment of bonuses relating to multiple years is due to his having taking up his post in the final quarter of 2011-12.

A charge of £33,800 (2012-13: £33,800) was also incurred in respect of employer's pension contributions. This was assessed as 26% of basic salary (2012-13: 26%). The Cash Equivalent Transfer Value for Professor Wingham at 31 March 2014 was £97,191 (31 March 2013: £50,818). The real increase in the cash equivalent transfer value for the period was £32,897 (2012-13: £32,067). Professor Wingham is an ordinary member of the Research Councils' Pension Scheme.

NERC Executive Board (NEB)

The NERC Executive Board (NEB) is responsible for:

- Overall corporate management
- Directing the development and implementation of Council's strategies, policies and decisions
- Effective financial management
- Developing and maintaining corporate information systems
- Ensuring that NERC is managed according to the required standards of accountability, regularity and propriety, achieving high standards of efficiency, effectiveness, economy and health and safety

NEB works with other research councils, and other bodies, on scientific, operational and administrative matters where there is benefit in doing so.

NEB members are appointed by the Chief Executive.

Table 1: Membership of NEB as at 31 March 2014

Name	Position	Notes
Professor Duncan Wingham	Chief Executive & Accounting Officer	
Professor Mark Bailey	Director, Centre for Ecology & Hydrology	
Mr Jonathan Bates	Director, People & Skills	Retires 23 May 2014, Mr Martin Kirke will then take up this role as Interim Director for an initial period of 2 years
Mr Paul Fox	Chief Operations Officer	Role changed from Director, Finance & Operations effective 12 December 2013
Mr Nigel Bird	Director, Finance	Appointed effective 12 December 2013
Dr Phil Heads	Associate Director, Strategy and Impact	Appointed effective 9 May 2013
Professor Ed Hill OBE	Director, National Oceanography Centre	
Professor Jane Francis	Director, British Antarctic Survey	Appointed effective 1 October 2013
Mr Richard Gledhill	Non-Executive Director	Appointed effective 1 September 2013
Mr Paul Hayden	Non-Executive Director	Appointed effective 1 September 2013
Professor John Ludden	Director, British Geological Survey	
Professor Stephen Mobbs	Director, National Centre for Atmospheric Science (NCAS)	Professor of Atmospheric Dynamics, University of Leeds
Professor Iain Gillespie	Director, Science	Appointed effective 1 September 2013
Professor Peter Jan van Leeuwen	Interim Director, National Centre for Earth Observation (NCEO)	Professor of Data Assimilation, University of Reading. Professor John Remedios, Head of Earth Observation Science at the University of Leicester, will take up this role on a permanent basis from 1 October 2014

With the exception of the Directors of NCAS and NCEO and the Non-Executive Directors, all members of NEB are NERC employees whose remuneration is discussed below. The Directors of NCAS and NCEO are not directly remunerated by NERC for their work on NEB, however their centres are funded by NERC. Non-Executives Directors receive honoraria of £10,000 p.a.

Audited Information

Remuneration of senior employees

Members of the council's senior management team received emoluments during the year, including taxable benefits as per Table 2; these individuals are all ordinary members of the Research Councils' Pension Scheme.

Table 2: Remuneration of senior employees' (2013-14)

Name	Note Ref	Pay 2013 - 2014 £000	Bonus 2013 - 2014 £000	Pension benefits 2013 - 2014 £000	Total emoluments 2013 - 2014 £000	Pay 2012 - 2013 £000	Bonus 2012 - 2013 £000	Pension benefits 2012 - 2013 £000	Total emoluments 2012 - 2013 £000	Pension increase in real terms £000	Accrued pension at 31/03/14 £000	Lump sum at 31/03/14 £000	Lump sum increase in real terms £000	Cash equivalent transfer value as at 01/04/13 £000	Cash equivalent transfer value as at 31/03/14 £000	Cash equiv. transfer value increase in real terms £000
Professor D Wingham		125 - 130	10 - 15	52	190 - 195	125 - 130	0 - 5	52	180 - 185	2.5 - 5	5 - 10	-	-	51	97	33
Professor M Bailey		90 - 95	0 - 5	18	110 - 115	90 - 95	5 - 10	27	120 - 125	0 - 2.5	35 - 40	115 - 120	2.5 - 5	751	816	16
Professor A E Hill OBE	2	95 - 100	5 - 10	(73)	30 - 35	105 - 110	5 - 10	29	140 - 145	(5) - (2.5)	40 - 45	120 - 125	(10) - (7.5)	784	778	(64)
Professor J Francis		45 - 50	-	18	65 - 70	-	-	-	-	0 - 2.5	0 - 5	-	-	-	16	12
Professor J Ludden		95 - 100	0 - 5	21	120 - 125	95 - 100	5 - 10	7	110 - 115	0 - 2.5	10 - 15	-	-	215	244	20
Professor P Nuttall OBE	3	-	0 - 5	-	0 - 5	95 - 100	5 - 10	-	105 - 110	-	-	-	-	-	-	-
Professor N Owens	4	-	-	-	-	30 - 35	0 - 5	-	30 - 35	-	-	-	-	-	-	-
Professor A Rodger	5	45 - 50	0 - 5	(123)	(75) - (70)	30 - 35	0 - 5	307	335 - 340	(7.5) - (5)	40 - 45	120 - 125	(17.5) - (15)	990	885	(117)
Mr J Bates		80 - 85	0 - 5	56	140 - 145	75 - 80	0 - 5	102	175 - 180	2.5 - 5	35 - 40	115 - 120	7.5 - 10	802	911	57
Mr P Fox	6	95 - 100	0 - 5	48	145 - 150	95 - 100	5 - 10	42	140 - 145	2.5 - 5	10 - 15	-	-	106	143	24
Mr N Bird	7	25 - 30	0 - 5	12	40 - 45	-	-	-	-	0 - 2.5	10 - 15	40 - 45	0 - 2.5	175	185	6
Prof I Gillespie		55 - 60	-	21	75 - 80	-	-	-	-	0 - 2.5	0 - 5	-	-	-	17	12
Dr P Heads	8	60 - 65	0 - 5	(29)	30 - 35	50 - 55	0 - 5	45	100 - 105	(2.5) - 0	30 - 35	50 - 55	(5) - (2.5)	557	568	(26)
Dr P Kempton	9	35 - 40	-	69	105 - 110	-	-	-	-	2.5 - 5	30 - 35	95 - 100	10 - 12.5	621	725	74
Mr C McKinnon	10	20 - 25	-	-	20 - 25	20 - 25	0 - 5	-	20 - 25	-	-	-	-	-	-	-
Dr P Newton	11	10 - 15	0 - 5	1	15 - 20	75 - 80	0 - 5	2	80 - 85	0 - 2.5	15 - 20	-	-	256	264	6
Band of highest paid Director's total remuneration	12				140 - 145				130 - 135							
Median total remuneration	13				30,292				30,766							
Median total remuneration ratio					4.71				4.31							

Notes:

- 1 Pay figures include salary, overtime, allowances and awards. All senior staff pay for the year is also their FTE salary with the exception of: Professor Gillespie and Professor Francis, who have FTE salaries within the £95k - £100k range; Mr Bird, Dr Kempton and Dr Newton, whose salaries were in the £75k - £80k range; and Professor Rodger and Mr McKinnon whose salaries were in the £90k - £95k range. Bonus figures shown are those paid out during each year. Compensation payments are all those made under an approved compensation scheme for early retirement or loss of office.
- 2 Professor Hill's Remuneration for 2012-13 includes an allowance for acting as Interim Director, BAS until 26 November 2012.
- 3 Stood down as Director, Centre for Ecology & Hydrology (CEH) to take up the post of Director, National Capability Intergration effective 1 March 2011, this was intended to be a 2 year posting, however her standing down became permanent effective 31 July 2012 when she became Director, Special Projects. This role ended 31 March 2013, after which she left NERC to take up the role of Professor of Arbovirology at the University of Oxford.
- 4 Professor Owens temporarily stood down as Director, British Antarctic Survey (BAS) effective 6 February 2012 and finished as a NERC employee on 30 June 2012.
- 5 Interim Director, British Antarctic Survey from 27 November 2012 until 30 September 2013.
- 6 Role changed from Director, Finance & Operations to Chief Operating Officer from 12 December 2013.
- 7 Director, Finance from 12 December 2013.
- 8 Dr Heads took up the post of Interim Director, Strategy and Partnerships from 1 July 2011 until 31 December 2012, he was appointed Associate Director, Strategy and Impact effective 9 May 2013.
- 9 Interim Director, Science from 1 June 2013 until 31 October 2013.
- 10 Director, Innovation & Communication from 7 January 2013 until 30 June 2013, insufficient service to require an RCPS pension.
- 11 Stood down as Director, Science 30 May 2013.
- 12 This is the salary of Professor Wingham plus his 2011-12 & 2012-13 bonuses paid during 2013-14, as he is the highest remunerated Director in post as at the end of the reporting period.
- 13 Total remuneration includes FTE equivalent salary, retention and responsibility allowances, non-consolidated performance related pay and benefits in kind. It does not include severance payments, employer pension contributions and cash equivalent transfer value of pensions.

Senior Employees' Awards in Respect of Early Termination

During the year an award in respect of early termination was made to Professor Rodger, formerly Interim Director of the British Antarctic Survey. Professor Rodger received £45,450, this included:

- Non-Taxable Severance of £30,000
- Taxable Severance of £15,450

During the year an award in respect of early termination was made to Dr Kempton, formerly Interim Director, Science. Dr Kempton received £56,500, this included:

- Non-Taxable Severance of £30,000
- Taxable Severance of £26,500

No other awards were made to senior employees during 2013-14.

Total Emoluments

Total emoluments include gross salaries, performance related bonuses and pension benefits. From 1 April 2004 basic pay rates for senior staff incorporate all existing allowances including supervisory and responsibility allowances and any contribution awards.

Pension benefits

All senior employees are ordinary members of the Research Councils' Pension Scheme (RCPS) which is a defined benefit scheme funded from annual Grant-in-aid on a pay-as-you-go basis.

Further details about the RCPS can be found in Note 5(d) of the Annual Accounts.

Cash Equivalent Transfer Value (CETV)

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's or partner's pension payable from the scheme. A CETV is a payment made by a pension scheme when the member leaves a scheme and chooses to transfer the benefits accrued in the former scheme. The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies. The CETV figures include the value of any pension benefit in another scheme which the individual has transferred to the Research Councils' pension arrangement and for which the RCPS has received a transfer payment commensurate with the additional pension liabilities being taken on. They also include any additional pension benefit accrued to the member as a result of their purchasing additional years and additional pension at their own cost.

CETVs are calculated in accordance with The Occupational Pension Schemes (Transfer Values) (Amendment) Regulations 2008 and do not take account of any actual or potential reduction to benefits resulting from Lifetime Allowance Tax which may be due when pension benefits are taken.

Real increase in the value of the CETV

The real increase in the value of the CETV reflects the increase effectively funded by the employer. It takes account of the increase in accrued pension due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme) and uses common market valuation factors for the start and end of the period.

Remuneration of Council Members

Members of Council receive an Honorarium of £6,850 per annum to cover all work for the Council including membership of Council's Boards; Professor Curran receives an additional £2,260 for being Chair of the NERC Council Audit Committee. The Chairman of Council, formerly Mr Wallis, now Sir Anthony Cleaver, receives a salary of £16,430 per annum. These rates are effective from 1 October 2009 and are formulated by the Department for Business, Innovation and Skills.

Council members are normally employed on fixed term contracts not exceeding 4 years.

Honoraria are not payable to members who are:

- Civil Servants
- Employees of NERC
- Full time employees of organisations whose funds are derived from Votes of Parliament (eg Government Departments, UK Atomic Energy Authority, British Broadcasting Corporation and other Research Councils)

Members of Council may not receive fees in addition to honoraria. University academic staff and retired Civil Servants are eligible to receive honoraria or fees. Council members may decline an honorarium if they wish.

Table 3: Membership of the NERC Council (2013-14)²

Name	Affiliation	Period of Appointment	Total Emoluments £'000		Notes
			2013-14	2012-13	
Mr E Wallis	Chairman	01 Jan 2007 - 31 Dec 2013	10 - 15	15 - 20	
Sir Anthony Cleaver	Chairman	01 Jan 2014 - 31 Dec 2017	0 - 5	0	
Professor D Wingham	Chief Executive and Deputy Chairman	01 Jan 2012 - 31 Dec 2015	0	0	1
Professor P Curran	Vice Chancellor and Professor of Physical Geography, City University London and Chair of NERC Council Audit Committee	08 Aug 2006 - 31 July 2014	5 - 10	5 - 10	
Professor I Boyd	Professor in Biology at the University of St Andrews and Chief Scientific Advisor to DEFRA	01 Feb 2013 - 31 Jan 2017	0	0	1
Mr R Douglas	Managing Director, Willis analytics for Willis Re	01 Aug 2008 - 31 July 2015	5 - 10	5 - 10	
Professor C Godfray CBE	Professor of Zoology, University of Oxford	01 Aug 2008 - 31 July 2015	5 - 10	5 - 10	
Mr N Folland	Executive Director, Group CEO's Office, Co-operative Group	01 Aug 2013 - 31 Jul 2017	0	0	
Professor L Heathwaite	Professor of Land & Water Science and Co-Director of the Centre for Sustainable Water Management in the Lancaster Environment Centre, Lancaster University and Part-time Scottish Government Chief Scientific Adviser for Rural & Environment.	17 Dec 2012 - 16 Dec 2016	0	0	1
Professor M Lockwood	Professor of Space Environment Physics in the Department of Meteorology, University of Reading. Individual merit scientist with Rutherford Appleton Laboratory's Space Science & Technology Department.	01 Mar 2007 - 31 July 2013	0 - 5	5 - 10	
Professor G Mace CBE	Professor of Biodiversity & Ecosystems and Head of the Centre for Biodiversity & Environment Research at University College London.	01 Aug 2011 - 31 July 2015	5 - 10	5 - 10	
Professor T Meagher	Professor and Chair of Plant Biology at the University of St Andrews	01 Aug 2007 - 31 Dec 2013	5 - 10	5 - 10	
Professor P Monks	Professor of Atmospheric Chemistry, University of Leicester	01 Aug 2011 - 31 July 2015	5 - 10	5 - 10	
Mr I Simm	Chief Executive, Impax Asset Management Group plc	01 Aug 2013 - 31 Jul 2017	0 - 5	0	
Professor Dame Julia Slingo DBE	Chief Scientist, Met Office	01 May 2009 - 30 April 2017	0	0	1
Ms C Tacon CBE	Chair of the Food & Drink Engineering Forum and the BBC Rural Affairs Advisory Committee.	01 Aug 2013 - 31 Jul 2017	0 - 5	0	
Professor A Watson	Professor at the College of Life & Environmental Sciences, University of Exeter	01 Aug 2008 - 31 July 2015	5 - 10	5 - 10	
Lord Willis of Knaresborough	Member of the House of Lords Science & Technology Committee.	01 Aug 2011 - 31 July 2015	5 - 10	5 - 10	
Ms R Willis	Independent consultant in environmental policy and practice	01 Aug 2011 - 31 July 2015	5 - 10	5 - 10	
Professor M Wilson	Professor at the Institute of Geophysics, School of Earth and Environment, Pro-Dean for Research in the Faculty of Environment, University of Leeds	01 Mar 2007 - 31 July 2013	0 - 5	5 - 10	

Notes

1. Honoraria are not payable to members who are civil servants, employees of NERC or full time employees of organisations whose funds are derived from Votes of Parliament.
2. Graeme Reid attends Council as a BIS observer and is not remunerated for his services.

Professor Duncan Wingham

Chief Executive and Accounting Officer

9 June 2014

Statement of Account for the Financial Year 2013-14

STATEMENT OF CHIEF EXECUTIVE'S RESPONSIBILITIES WITH RESPECT TO THE FINANCIAL STATEMENTS

Under Paragraph 3 of Schedule 1 to the Science and Technology Act 1965, the Secretary of State for the Department for Business, Innovation and Skills has directed the Council to prepare for each financial year a statement of accounts in the form and on the basis set out in the Accounts Direction. The accounts are prepared on an accruals basis and must give a true and fair view of the state of affairs of the Natural Environment Research Council and of its comprehensive net expenditure and cash flows for the financial year.

In preparing the accounts the Chief Executive as the Accounting Officer is required to comply with the requirements of the Government Financial Reporting Manual and in particular to:

- observe the Accounts Direction issued by the Department for Business, Innovation and Skills, including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis;
- make judgements and estimates on a reasonable basis;
- state whether applicable accounting standards as set out in the Government Financial Reporting Manual (www.hm-treasury.gov.uk/frem_index.htm) have been followed, and disclose and explain any material departures in the financial statements; and
- prepare the financial statements on the going concern basis.

The Department for Business, Innovation and Skills has appointed the Chief Executive as Accounting Officer of the Natural Environment Research Council. The responsibilities of an Accounting Officer, including responsibility for the propriety and regularity of the public finances for which the Accounting Officer is answerable, for keeping of proper records and for safeguarding the Natural Environment Research Council's assets, are set out in the Non-Departmental Public Bodies' Accounting Officers' Memorandum, issued by HM Treasury and published in "Managing Public Money" (The Stationery Office).

GOVERNANCE STATEMENT 2013-2014

Scope of Responsibility

As Accounting Officer, I have responsibility for maintaining a sound system of governance and internal control that supports the achievement of NERC's policies, aims and objectives. I also safeguard the public funds and NERC assets for which I am personally responsible, ensuring they are properly accounted for and used economically, efficiently and effectively in accordance with "Managing Public Money".

Governance Structure

The NERC Council is the senior decision making body and includes members from NERC's academic and user communities. Membership is reviewed annually, appointments are advertised nationally and members are appointed by the Secretary of State for Business, Innovation and Skills. Details of Council membership can be found at: www.nerc.ac.uk/about/organisation/boards/council/membership/

The role of NERC Council is to decide on all issues of major importance, principally issues of corporate strategy, key strategic objectives and targets, major decisions involving the use of resources and personnel, including key appointments. Responsibility for carrying out key strategy and responsibilities associated with the day to day management of NERC is delegated to the Chief Executive.

The powers, roles, responsibilities and membership of Council are defined in its Royal Charter. The nature of its relationship with its sponsor department, the Department for Business Innovation and Skills (BIS), is defined in the Management Statement and Financial Memorandum agreed with DIUS (a predecessor department of BIS) in 2005. These documents are available on the NERC website at: www.nerc.ac.uk/about/organisation/boards/council/

The Council's main topics of discussion during the year, were as follows:

- The New NERC Strategy: *The Business of the Environment*
- The evaluation of NERC Research Centre science excellence and impact
- Approval of the Heriot-Watt-BGS joint centre on oil and gas
- Enhancing community engagement and interdisciplinary working
- £100m of new NERC investment in fifteen Doctoral Training Partnerships (DTPs)
- NERC Centre Ownership and Governance Project

The Audit and Risk Assurance Committee (ARAC) is an advisory body. It is authorised by Council to investigate any activity within its terms of reference, which include the review of NERC's internal and external audit reports and financial statements and to review NERC's internal control systems in matters such as risk, health & safety and security. During the year its main activities were:

- An examination of the NERC Annual Report and Statutory Accounts 2013-14
- Scrutiny and the provision of advice upon the management and mitigation of key risks and business critical projects
- The quality, accuracy and completeness of the finance, procurement, grants, payroll and human resources services provided by NERC's shared service centre UKSBS Ltd
- NERC Centre Ownership and Governance Project

The Council's Remuneration Committee determines base pay movement and annual performance bonuses for NERC's staff at Band 1 and 2. The committee met once in 2013-14.

I am satisfied the structure, operation and performance of Council and ARAC comply with the Corporate Governance Code. NERC governance arrangements were considered as part of the 2013 Triennial Review.

Council and board attendance record

Name	Position held	Council attendance	ARAC attendance	Remuneration attendance
Mr Ed Wallis	Chairman (Council)			
	Chairman (Remuneration)	4/4		1/1
Sir Anthony Cleaver	Chairman (Council)	1/1		
Prof Duncan Wingham	CE NERC	5/5		1/1
Prof Paul Curran	Member (Council)	5/5	5/5	1/1
	Chairman (ARAC)			
	Member (Remuneration)			
Mr Rowan Douglas	Member (Council)	4/5		
Prof Charles Godfray CBE	Member (Council)	4/5		
Prof Mike Lockwood	Member (Council)	2/2		
Prof Georgina Mace CBE	Member (Council)	5/5		
Prof Thomas Meagher	Member (Council)	2/2		
Prof Paul Monks	Member (Council)	5/5	4/5	1/1
	Member (ARAC)			
	Member (Remuneration)			
Prof Dame Julia Slingo DBE	Member (Council)	4/5		
Prof Andrew Watson	Member (Council)	5/5		
Prof Marjorie Wilson *	Member (Council)	0/0		
Lord Willis of Knaresborough	Member (Council)	3/5		
Ms Rebecca Willis	Member (Council)	5/5		
Prof Louise Heathwaite	Member (Council)	5/5		
Prof Ian Boyd	Member (Council)	4/5		
Mr Nick Folland	Member (Council)	2/3		
Mr Ian Simm	Member (Council)	3/3		
Ms Christine Tacon CBE	Member (Council)	3/3		
Mr David Hyde	Member (ARAC)		2/2	
Mr Bryan Thompson	Member (ARAC)		5/5	
Ms Tracey Martin	Member (ARAC)		2/2	
Mr Ian Foy	Member (ARAC)		2/2	
Mr Jonathan Bates	Member (Remuneration)			1/1

Note: * Prof Marjorie Wilson retired from Council during the year.

Risk Assessment

Our business is to fund excellent, peer-reviewed environmental science that helps us:

- understand and predict how the planet works; and
- manage our environment responsibly as we pursue new ways of living, doing business, escaping poverty and growing economies.

Whilst the science we investigate can be sensitive, such as our contribution to ensuring growth with responsible environmental management in the energy sector, we have a low risk appetite in terms of the way we do business. We fund research, innovation and advanced training only with UK eligible research institutions and make our investment decisions using a transparent peer review process.

NERC encourages sound properly managed risk taking and recognises that effective risk management, rather than risk avoidance, is an essential ingredient for successful delivery of our strategy. A robust risk management process exists including an examination of high risk items and mitigation actions by directors, at ARAC and Council. It is my judgement that our process meets benchmarking standards and business need. I am satisfied with the performance of our risk management system and this view is supported by the 'substantial assurance' provided by AASG.

The key risks facing NERC at present are:

1. Research Centre Ownership and Governance: Failure to establish NERC's Research Centres on a sustainable basis, prevents NERC from improving its strategic focus as funder and champion of environmental science, and seriously impedes the ability of Research Centres to maintain excellent science and impact outcomes.
2. Our ability to deliver the NERC Strategy is adversely impacted by the external Admin budget constraints/pressures.
3. New Polar Flagship: if the new Polar Flagship is not built on time and within budget, NERC will suffer reputational damage.

I am satisfied that these risks have appropriate mitigating actions and are being actively managed.

Data Protection & Information Assurance

During 2013-14, the NERC Information Assurance Group (IAG) continued to formally meet and coordinate NERC information assurance and information risk management. There has been a focus on Board level awareness of information assurance and cyber security, with a presentation to the NERC Audit & Risk Assurance Committee from The National Archives. The NERC Executive Board also agreed that an information assurance risk be added to the Top Risk Register.

Macpherson Review

Following the Macpherson review, NERC was required to review its use of analytical modelling and did not identify any that were considered to be business critical. This was communicated to BIS and I can confirm that NERC complies with the requirements set out in Howard Orme's letter dated 15 May 2013.

Tax arrangements of public sector appointees

The Alexander Review was published in May 2012 making a number of recommendations to ensure that the highest standards of integrity could be demonstrated in the tax arrangements of senior public appointees. I can confirm that NERC's senior staff are all paid through the payroll and that arrangements are in place through retained HR to provide assurance that appropriate tax arrangements are in place to cover any other appointees covered by the report. As such, NERC is in compliance with the recommendations in the HM Treasury 'Review of the tax arrangements of public sector appointees' published in May 2012.

Assessment of Internal Control

My assessment is informed by:

NERC Directors Statement on Internal Control, concerning the effectiveness of internal control within their area of responsibility. The 2013 DASIC exercise did not identify any significant internal control weaknesses and confirmed that:

- Board members and senior officials with significant financial responsibility are on the organisation's payroll and are subject to appropriate taxation.
- There have been no concerns raised over fraudulent activity by members of staff under the whistleblowing policy
- There were no reported significant lapses in data security.
- A counter fraud assessment and action plan have been implemented.
- Sound systems of financial and personnel management control are in operation.
- Activity is conducted in compliance with Cabinet Office controls.

In 2013-14 NERC conducted a risk based review of fraud and error in accordance with instructions from BIS. The review included an assessment of the potential for fraud and error, a capacity assessment and an action plan. The outcome of the review was that there were no particular high risk areas of fraud and error within NERC but the action plan identified some areas where improvements could be made. The action plan will be pursued in 2014-15 and a further review conducted. This work has removed the need for any separate work to be undertaken under the Managing Risk of Financial Loss (MRoFL) initiative.

A detective control at National Oceanography Centre (NOC) identified a supplier overpayment of £88,626.59. A full investigation has been completed and recovery action is on-going. Actions to strengthen procurement control are being implemented in partnership with the UKSBS.

The Director of the Audit and Assurance Service Group (AASG), NERC's internal auditor, provides an annual internal audit opinion on the overall adequacy and effectiveness of NERC's framework of governance, risk management and control. This opinion is informed by the internal audit work undertaken during the year and includes a review of the regularity of expenditure on Research Council grants at all eligible Research Organisations. The Director has provided NERC with an overall opinion of Substantial Assurance reflecting a basically sound system of internal control, but there are some weaknesses that may put achievement of some system objectives at risk.

Of the nine assurances, four were advisory reports. One of these was a major review of the Financial Management of EC Grants, with a specific focus on one project. The report has highlighted a number of areas for improvement in EC grant administration, which were implemented during the year. Only one area received limited assurance, which was Organisational Change Management. Actions to more clearly define the respective roles of the change leader and change facilitator are currently being implemented. The four remaining assurances reported substantial assurance.

The work of the AASG provides assurance in four areas: NERC core activities; cross-Council activities which NERC is involved in; processes shared by NERC with the UKSBS Ltd; The Funding Assurance Programme (FAP).

The cross-Council audit of IT business continuity undertook surprise spot checks of IT business continuity preparedness at three NERC research centres. Two centres provided satisfactory responses, one did not. Steps have been taken to increase awareness of the response procedure across NERC.

Results from the SBS (SBSSA) work confirm that the controls operating across the end-to-end processes have continued to improve. 100% (14) of the processes examined in 2013-14 received substantial assurance, compared to 86% (12) in 2012-13. However, not all material improvements have been made to the system of internal control to ensure that system objectives are achieved. AASG have identified two key areas where the control and risk management framework within the UKSBS need improving:

- There are legacy quality shortfalls in the master data that supports the Purchase to Pay and Order to Cash processes; and
- Non-compliance with some iExpenses processes remains high across the client base (e.g. in Q3 10% of expense claims examined were not properly receipted).

The management letter from NAO concerning the audit of the 2013-14 annual Accounts did not raise any material issues that will have implications for internal control.

UK SBS

The UK SBS Ltd provides processing services in human resources, procurement, payroll, finance, grants, and IT to all seven Research Councils. During 2013-2014, work was on going to develop further the security and controls framework operating between the Research Councils and UK SBS Ltd.

It is my view, based upon the work of AASG, that the internal control regime operating within UKSBS is not fully effective. These longstanding control weaknesses leave NERC exposed to an enhanced risk of fraud or error. However a combination of compensating controls and checks within NERC, coupled with the extensive substantive audit testing of individual transactions by both AASG and NAO lead me to reasonably conclude that NERC has not suffered any losses or material errors in 2013-14.

The Annual Governance Statement (AGS) has to record the level of assurance received in respect of the work carried out by UK SBS Ltd on behalf of the Research Councils (RC). In past years this assurance has been recorded through the AASG report and commentary from the RC's Client Services Group (CSG) which oversaw the UK SBS Ltd/RC relationship and provided a report for the AGS. Reports on AASG activity are still included in this AGS but the CSG role has altered as direct ownership and control of UK SBS Ltd has passed from the Research Councils to BIS.

This year the Chief Executive Officer of UK SBS Ltd has provided assurance directly to Research Council Accounting Officers. In a draft letter dated 28 February 2014, the CEO provided a personal assurance that the shared service had operated properly during the year. The letter provides a detailed commentary in ten specific areas, listed below:

- Significant challenges faced by the business in 2013-2014
- Progress against audit recommendations
- The Company's Risk Management and Internal Control and Compliance Arrangements
- The Company's performance against its Critical Performance Indicators (CPI)
- Counter Fraud
- Information Security and Data Security
- IT Challenges and the effectiveness of the Company's Security Arrangements
- The Client Governance Forums
- Internal Audit Annual Assurance Statement
- Significant challenges the business expects to face in the course of 2014-2015 financial year

The letter highlights improvements in system controls and acknowledges that significant challenges remain. While much needs to be done, UK SBS Ltd has concluded that risks have generally been managed to an acceptable level.

Overall, I note the content of the UK SBS Ltd letter and recognise it as a source of assurance for this year and in future years. I also note the observations made by AASG in relation to the Control Security Framework and the potential for interruption during the Oracle upgrade and other potential changes in the UKSBS business environment. Nevertheless, I would expect the improvement to continue, especially in the following areas; ensuring a complete system of Disaster Recovery is in place; improving the quality shortfalls in master data for Suppliers and Customers; to continue to reduce the number of high priority audit recommendations as well as the time taken to close these recommendations. As a result, the level of assurance will also improve.

Conclusion

The conclusion of my review is that NERC's overall governance and internal control structures are sound and ensure that public money is properly accounted for and used efficiently and effectively.

Professor Duncan Wingham

Chief Executive and Accounting Officer

9 June 2014

THE CERTIFICATE AND REPORT OF THE COMPTROLLER AND AUDITOR GENERAL TO HOUSE OF PARLIAMENT

I certify that I have audited the financial statements of the Natural Environment Research Council for the year ended 31 March 2014 under the Science and Technology Act 1965. The financial statements comprise: the Statement of Comprehensive Net Expenditure, the Statement of Financial Position, the Statement of Cash Flows, the Statement of Changes in Taxpayers' Equity and the related notes. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration Report that is described in that report as having been audited.

Respective responsibilities of the Council, Accounting Officer and auditor

As explained more fully in the Statement of Chief Executive's Responsibilities With Respect To The Financial Statements, the Accounting Officer is responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. My responsibility is to audit, certify and report on the financial statements in accordance with the Science and Technology Act 1965. I conducted my audit in accordance with International Standards on Auditing (UK and Ireland). Those standards require me and my staff to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Natural Environment Research Council's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Natural Environment Research Council; and the overall presentation of the financial statements. In addition I read all the financial and non-financial information in the Annual Report to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by me in the course of performing the audit. If I become aware of any apparent material misstatements or inconsistencies I consider the implications for my certificate.

I am required to obtain evidence sufficient to give reasonable assurance that the expenditure and income reported in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Opinion on regularity

In my opinion, in all material respects the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Opinion on financial statements

In my opinion:

- the financial statements give a true and fair view of the state of the Natural Environment Research Council's affairs as at 31 March 2014 and of its comprehensive net expenditure for the year then ended; and
- the financial statements have been properly prepared in accordance with the Science and Technology Act 1965 and Secretary of State directions issued thereunder.

Opinion on other matters

In my opinion:

- the part of the Remuneration Report to be audited has been properly prepared in accordance with the Secretary of State directions made under by the Science and Technology Act 1965; and
- the information given in the Delivering the Strategy and Management Commentary sections for the financial year for which the financial statements are prepared is consistent with the financial statements.

Matters on which I report by exception

I have nothing to report in respect of the following matters which I report to you if, in my opinion:

- adequate accounting records have not been kept or returns adequate for my audit have not been received from branches not visited by my staff; or
- the financial statements and the part of the Remuneration Report to be audited are not in agreement with the accounting records or returns; or
- I have not received all of the information and explanations I require for my audit; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

Report

I have no observations to make on these financial statements.

Sir Amyas C E Morse

Comptroller and Auditor General

National Audit Office

157-197 Buckingham Palace Road

Victoria

London

SW1W 9SP

Date: 17 June 2014

**STATEMENT OF COMPREHENSIVE NET EXPENDITURE FOR THE PERIOD
ENDED 31 MARCH 2014**

	Notes	2014 £000	2013 £000
Expenditure			
Staff costs	5(b)	105,681	105,828
Staff early retirements	6	888	8,255
Grants and training	7	202,140	170,660
Other operating costs	8	98,348	92,773
Depreciation	9(a)	30,681	28,672
Amortisation	10	88	59
Losses and Impairments of joint ventures and unlisted investments	9(c)	49	2,278
Impairment of property, plant and equipment	9(a),11	1,472	5,359
Total expenditure		439,347	413,884
Income	4	(66,992)	(59,720)
Net operating costs		372,355	354,164
Finance lease interest		728	799
Interest receivable		(11)	(12)
Net expenditure after interest		373,072	354,951
CEH restructuring	14	(18)	191
Unwinding of discount	14	132	355
Change in discount rate	14	23	552
(Gain) / Loss on disposal of fixed assets and assets held for sale		(2,209)	1,514
Total net expenditure for the year		371,000	357,563
Other comprehensive expenditure			
Net gain on revaluation of property, plant and equipment		(23,816)	(1,580)
Net gain on revaluation of intangible assets		(5)	(4)
TOTAL COMPREHENSIVE EXPENDITURE FOR THE YEAR ENDED 31 MARCH 2014		347,179	355,979

All activities are continuing.

The notes on pages 52 to 78 form part of these accounts.

STATEMENT OF FINANCIAL POSITION AS AT 31 MARCH 2014

	Notes	£000	31 March 2014 £000	31 March 2013 £000
Non-current assets				
Property, plant and equipment	9(a)(b)	430,179		401,183
Intangible assets	10	211		117
Non-current receivables	12(b)	75		90
Jointly Controlled Entities and unlisted investments	9(c)	76		125
Total non-current assets			430,541	401,515
Current assets				
Assets classified as held for sale	11	70		70
Trade and other receivables	12(a)	26,707		24,608
Cash and cash equivalents	15	9,687		21,962
Total current assets			36,464	46,640
Total assets			467,005	448,155
Current liabilities				
Trade and other payables	13(a)	(72,127)		(68,346)
Provisions	14	(619)		(3,609)
Total current liabilities			(72,746)	(71,955)
Non-current assets plus current assets less current liabilities			394,259	376,200
Non-current liabilities				
Provisions	14	(6,162)		(6,487)
Trade and other payables	13(b)	(5,790)		(7,097)
Total non-current liabilities			(11,952)	(13,584)
Assets less liabilities			382,307	362,616
Taxpayers' Equity				
Revaluation reserve			108,946	94,445
Income and expenditure reserve			273,361	268,171
TOTAL GOVERNMENT FUNDS			382,307	362,616

The notes on page 52 to 78 form part of these accounts.

Professor Duncan Wingham

Chief Executive and Accounting Officer

9 June 2014

STATEMENT OF CASH FLOWS FOR THE PERIOD ENDED 31 MARCH 2014

	Notes	2014 £000	2013 £000
Cash flows from operating activities			
Net expenditure after interest		(373,072)	(354,951)
Depreciation charge	9(a)	30,681	28,672
Amortisation charge	10	88	59
Loss on joint venture	9(c)	49	2,278
Impairment charged to net expenditure account	9(a)	1,472	5,359
(Decrease) in provisions	14	(3,452)	(2,225)
(Increase) in trade and other receivables	12	(2,084)	(488)
Increase in trade and other payables	13	3,854	2,187
Net cash outflow from operating activities		(342,464)	(319,109)
Cash flows from investing activities			
Payments to acquire property, plant and equipment	9(a)(b)	(37,603)	(33,908)
Payments to acquire intangible assets	10	(177)	
Receipts from disposal of property, plant and equipment, intangible assets and investments		2,479	8,226
Net cash outflow from investing activities		(35,301)	(25,682)
Cash flows from financing activities			
Grant-in-aid and other BIS funding	3	366,870	353,916
Capital element of finance lease payments	17	(1,380)	(1,535)
Net cash inflow from financing activities		365,490	352,381
Net (decrease) / increase in cash and cash equivalents in the period		(12,275)	7,590
Cash and cash equivalents at the beginning of the period		21,962	14,372
Cash and cash equivalents at the end of the period		9,687	21,962

The notes on pages 52 to 78 form part of these accounts.

**STATEMENT OF CHANGES IN TAXPAYERS' EQUITY FOR THE PERIOD
ENDED 31 MARCH 2014**

	Notes	Income & expenditure reserve £000	Revaluation reserve £000	Total government funds £000
At 1 April 2012		263,933	100,746	364,679
Changes in taxpayers' equity for 2012-13				
Grant-in-aid and other BIS funding	3	353,916	-	353,916
Revaluation in year		-	1,584	1,584
Net expenditure for the year		(357,563)	-	(357,563)
Release to net expenditure		7,885	(7,885)	-
Balance at 31 March 2013		268,171	94,445	362,616
Changes in taxpayers' equity for 2013-14				
Grant-in-aid, notional costs and other BIS funding	3	366,870	-	366,870
Revaluation in year		-	23,821	23,821
Net expenditure for the year		(371,000)	-	(371,000)
Release to net expenditure		9,320	(9,320)	-
Balance at 31 March 2014		273,361	108,946	382,307

NOTES TO THE ACCOUNTS

I. Statement of accounting policies

a. Basis of accounting

- (i) The accounts have been prepared under the historical cost convention, modified to account for the revaluation of property, plant and equipment, intangible assets and inventories in accordance with the Government Financial Reporting Manual (FReM) for 2013-14. The accounting policies contained in the FReM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector context. The accounts, which give a true and fair view, have been prepared in accordance with The Science and Technology Act 1965 and with directions made by the Secretary of State. Where the FReM permits a choice of accounting policy, the accounting policy which is judged to be most appropriate to the particular circumstances of the Natural Environment Research Council for the purpose of giving a true and fair view has been selected.
- (ii) The accounts meet the accounting and disclosure requirements of the Companies Act 1985 and accounting standards issued or adopted by the Accounting Standards Board in as far as these requirements are appropriate in accordance with the FReM.
- (iii) The accounts of all NERC owned research centres have been incorporated into these accounts.
- (iv) These financial statements are presented in pounds sterling, NERC's functional currency, and all amounts have been rounded to the nearest thousand pound (£000).

Adoption of standards and changes in policy

All International Reporting Standards, Interpretations and Amendments to published standards, effective at 31 March 2014, have been adopted in these financial statements, taking into account the specific interpretations and adaptations included in the FReM.

Effective for future financial years

The IASB and IFRIC issued certain standards and interpretations with an effective date after these financial statements. Where these changes are relevant to NERC's circumstances they are listed below and will be adopted at the effective date. They have not been adopted early and their adoption is not expected to have a material impact on NERC's reported income or net assets in the period of adoption.

IFRS 9 Financial instruments, will replace IAS 39 Financial Instruments: Recognition and Measurement in its entirety. IFRS 9 is expected to improve and simplify the reporting of financial instruments. The new standard will be effective for accounting periods beginning on or after 1 January 2015 subject to EU endorsement. Earlier application is permitted. The standard is part of a wider project to replace IAS 39 and it is not clear what the impact of the introduction of this standard will have on NERC. NERC will undertake an assessment of the impact of IFRS 9 once the full requirements are known.

IFRS 12 Disclosure of Interests in Other Entities requires disclosure of arrangements where the reporting entity owns a majority of shares but does not consolidate and arrangements where the reporting entity owns more than 20% of shares but does not equity account, and vice versa. This standard should not give rise to any accounting changes, but might result in additional disclosure. Adoption is expected to be effective for periods beginning on or after 1 January 2014.

b. Going Concern

These accounts have been prepared on the basis of a Going Concern. Any deficit shown on the income and expenditure reserve will be extinguished over time, having regard to the resource and capital budgets to which NERC can be expected to have access.

In April 2011, Cabinet Office announced that all non-departmental public bodies (NDPB's) would have to undergo a substantive review at least once every three years. These Triennial Reviews have two purposes:

- To provide a robust challenge of the continuing need for individual NDPBs for both their function and form; and
- Where it is agreed that a particular body should remain as an NDPB, to review the control and governance arrangements in place to ensure that the public body is complying with recognised principles of good corporate governance.

Government has published a report of the Triennial Review which includes recommendations to strengthen the effectiveness and efficiency of the seven Research Councils working together. BIS and the Research Councils have agreed a plan to implement the Triennial Review recommendations, in line with wider strategic reform of BIS, from 2014-15. Thus NERC continues to be a going concern.

c. Assets

Property, plant and equipment

Expenditure on property, plant and equipment includes the purchase of land and buildings, construction and services projects, and equipment valued at £10,000 or above (2012-13: £10,000).

Property, plant and equipment are stated at depreciated historical cost or valuation. Costs of acquisition, comprising only those costs that are directly attributable to bringing the asset into working condition for its intended use, are capitalised. Land, buildings, ice stations in Antarctica, ships and aircraft are independently and professionally revalued every five years. These assets are subject to annual indexation when a full revaluation is not completed.

All UK land and buildings were valued in 2012-13 by Rafe Staples BSc (Hons), MRICS (member of The Royal Institution of Chartered Surveyors) acting as an external valuer on the basis of Existing Use Value in accordance with the RICS Valuation Professional Standards. These valuations excluded the scientific apparatus.

The British Antarctic Survey (BAS) Antarctic Research Stations were valued in 2011-12 via a desk-based valuation by Rafe Staples BSc (Hons), and Kirstie Wheeler BSc (Econ), MRICS acting as an external valuer, on the basis of Existing Use Value calculated by reference to Depreciated Replacement Costs. The Estimated Replacement Costs were calculated by BAS and adjusted by BAS and Powis Hughes in accordance with the RICS Valuation Standards.

The four research ships, RRS *Discovery*, RRS *James Clark Ross*, RRS *Ernest Shackleton* and RRS *James Cook*, were revalued in 2013-14 by E.A. Gibson Shipbrokers Ltd. All aircraft were also revalued in 2013-14 by the International Bureau of Aviation Group Limited.

All other plant and equipment and transport are revalued using relevant indices.

Any surplus or deficit on revaluation is taken to a revaluation reserve, except that any permanent diminution in value is charged to the statement of comprehensive net expenditure in the year in which it is recognised. Where subsequent evidence suggests a partial or complete reversal of the diminution in value, this is also reflected in the statement of comprehensive net expenditure in the year in which it is recognised as per IAS 36.

Increased depreciation charges arising from the revaluation are matched by annual transfers from the revaluation reserve to the income and expenditure reserve. On the disposal of a revalued asset, that element of the revaluation reserve which becomes realised as a result is transferred directly to the income and expenditure reserve.

Freehold land is not depreciated. All other tangible fixed assets are depreciated in order to write off the value of the asset less its estimated residual value over their estimated useful economic lives using modified reducing balance depreciation methodology. These lie within the following ranges:

Leasehold land	-	over the terms of the lease
Freehold buildings	-	up to 50 years or valuer's estimates of economic life
Long leasehold buildings	-	up to 50 years (or the length of the lease if less)
Short leasehold buildings	-	over the length of the lease
Antarctic ice stations	-	up to 35 years or valuer's estimates of remaining useful life
Plant and machinery	-	10 to 15 years
Ships and aircraft	-	minimum of 20 years for ships, 15 years for aircraft
Scientific, office and major computing equipment	-	5 to 10 years
Motor vehicles	-	3 to 7 years
Assets under construction	-	not depreciated until brought into use

Property, plant and equipment are depreciated from date when they are available for use. The residual values of assets are reviewed on an annual basis.

Component accounting

Property, plant and equipment may have parts with different useful lives. In accordance with the provisions of IAS 16 each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item is depreciated separately.

d. Investments

If material and with controlling interest, NERC would consolidate its investments into its financial statements in accordance with IAS 27 Separate Financial Statements. Where immaterial or without controlling interest, the investment will not be consolidated, but where possible its fair value will be reported in accordance with IAS 39 Financial Instruments: Recognition and Measurement.

Where an investment is classified as an interest in a jointly controlled entity, it will be accounted for using the equity method in accordance with IAS 31 Interests in Joint Ventures and carried at cost less any provision for impairment. The profit or loss for the year would be credited or charged to the statement of comprehensive net expenditure in the year that it arises.

e. Intangible assets

Intangible assets comprise purchased or developed computer software and websites and are stated at the lower of historical cost less accumulated amortisation or valuation. Intangibles are given definite useful lives and are amortised over a period not exceeding ten years on a straight line basis over the useful life of the asset from the date of use based on nil residual value. The intangible assets are revalued on an annual basis using the HMT Treasury GDP deflator figures.

f. Impairment

The carrying amounts of the Council's property, plant and equipment, intangible assets and financial assets are reviewed at each statement of financial position date to determine whether there is any indication of impairment: property, plant and equipment, intangible assets and financial assets are considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of the assets. If any such indication exists, the assets' recoverable amounts are estimated.

An impairment loss is recognised whenever the carrying amount of an asset exceeds its recoverable amount. To the extent the asset has not previously been revalued, impairment losses are recognised in the statement of comprehensive net expenditure.

g. Assets held for sale

Where a non-current asset, whose value will be recovered principally through sale rather than through continuing use, is available for its immediate sale in its present condition and its sale is highly probable, it is classified as 'held for sale' and presented separately on the face of the statement of financial position. A sale is highly probable where there: is evidence of management commitment; there is an active programme to locate a buyer and complete the plan; the asset is actively marketed for sale at a reasonable price; and the sale will normally be completed within 12 months from the date of classification.

Assets held for sale are stated at the lower of net book value (carrying amount) and fair value less costs to sell. These assets are not depreciated. Depreciation ceases at the date an item of property, plant and equipment is classified as an asset held for sale.

h. Employee benefits

Under IAS 19 'Employee Benefits' an entity is required to recognise short term employee benefits when an employee has rendered service in exchange for those benefits. Included in the financial statements is an accrual for the outstanding employee holiday entitlement at 31 March 2014 on an undiscounted basis.

i. Ownership of equipment purchased with NERC research grants

Equipment purchased by an Institution with research grant funds supplied by NERC, belong to the Institution and are not included in NERC's property, plant and equipment. Through the Conditions of Grant applied to funded Institutions, NERC reserves the right to determine the disposal of such equipment and how any disposal proceeds are to be utilised.

j. Government grants receivable and other income

Under the FReM, NDPBs regard grants and grant-in-aid received for revenue purposes as contributions from controlling parties giving rise to a financial interest in the body. As a result, grants and grant-in-aid received is credited to the income and expenditure reserve rather than being recognised as income in the statement of comprehensive net expenditure.

Other operating income is shown net of trade discounts, value added tax and other taxes.

k. Research and development

As an organisation wholly engaged in research, NERC does not classify research and development expenditure separately in the accounts. It is reported under operating costs in the statement of comprehensive net expenditure.

Intellectual property rights arising from the Council's research and development have not been included in these accounts as their market value cannot be readily estimated. The anticipated annual income generated from such rights is not material in value and is credited to the statement of comprehensive net expenditure on receipt.

l. Research and training grants

The majority of research grants and fellowships are paid by the Council on an instalment basis in arrears in accordance with an agreed payment profile. The majority of studentship payments are paid on a quarterly instalment basis in advance directly to the research institute.

Payments made in advance or in arrears are accounted for on an accruals basis in the financial statements. Future commitments at the balance sheet date are disclosed in Note 16 of the financial statements.

m. Insurance

In line with government policy, NERC carries its own risks in respect of employment of staff and assets, except where there exists a statutory requirement to insure or where commercial insurance represents better value for money.

n. Foreign currencies

Foreign currency balances representing cash or amounts to be received or paid in cash ('monetary items') are expressed in pound sterling at the rate(s) of exchange ruling at the statement of financial position date. Non-monetary items that are measured at fair value in a foreign currency are translated using the spot exchange rate at the date the value is determined. Non-monetary items that are measured at historical cost are translated using the spot exchange rate at the time of the transaction. Transactions in foreign currencies are recorded at the rate ruling at the time of the transaction. All exchange differences are taken to the statement of comprehensive net expenditure.

o. Value Added Tax

As NERC is partially exempt for VAT purposes, irrecoverable VAT is charged to the relevant expenditure category or included in the capitalised purchase cost of property, plant and equipment. Where output tax is charged or input tax is recoverable the amounts are stated net of VAT. NERC has charitable status for VAT purposes.

p. Pension and early retirement costs

Payments are made to the Research Councils' Pension Scheme in respect of superannuation benefits for Council staff. In addition the council also paid contributions to a number of other multi-employer pensions schemes for specific groups of employees; these include inter alia the Merchant Navy Officers' and Ratings' Pensions Funds and Plans. The costs of early retirements are charged to NERC's accounts in the year in which the binding decision is taken to release staff and liabilities recognised.

Payments by the Council of early retirement lump sums are recoverable from the Research Councils' Pension Scheme when recipients achieve normal retirement age. Recoverable amounts are recognised as receivables in these accounts and offset against annual staff restructuring costs.

q. Cash and cash equivalents

Cash and cash equivalents comprise cash balances and deposits which are repayable on demand.

r. Derivatives and other financial instruments

Due to the non-trading nature of its activities and the way in which NERC is financed, NERC is not exposed to the degree of financial risk faced by non-public sector entities. Moreover, financial instruments play a much more limited role in creating or changing risk that would be typical of the listed companies to which IAS 32, 39 and IFRS7 mainly apply. NERC has very limited powers to borrow or invest surplus funds and financial assets and liabilities are generated by day to day operational activities and are not held to change the risks facing NERC in undertaking its activities.

Foreign currency risk

NERC is subject to foreign currency risk through the maintenance of bank accounts in foreign currencies (predominantly the EUR and the USD) to deal with day-to-day overseas transactions.

Trade receivables

Trade receivables are not interest bearing and are carried at original invoice amount less allowance for impairment. Provision for impairment is established when there is objective evidence that the Council will not be able to collect all amounts due according to the original terms of the receivable. The amount of provision is the difference between the carrying amount and recoverable amount and is recognised in the statement of comprehensive net expenditure.

Trade and other payables

Trade and other payables are recognised in the period in which related money, goods or services are received or when a legally enforceable claim against NERC is established or when the corresponding assets or expenses are recognised.

s. Provisions

Provisions are recognised when it is probable that NERC will be required to settle a present obligation and a reliable estimate can be made of that obligation. The obligation is normally the amount that NERC would rationally pay to settle the obligation at the statement of financial position date or to transfer it to a third party at that time.

This may require estimating the future cash flows in current-year prices (i.e. at the price level prevailing in the year covered by the accounts) and, where the time value of money is material, discounting them at the standard public sector real rate set by HM Treasury, currently +1.80% for pension provisions and for all other provisions: short-term -1.90%, medium-term -0.65% and long-term 2.20%.

t. Decommissioning costs

Decommissioning costs are recognised as soon as the obligation exists. For Antarctic stations and other assets in the course of construction the percentage completion method will be used to determine the current obligation. A specific provision is established to cover the current value of the expected future costs of decommissioning the asset.

u. Finance lease

NERC has the use of a ship for which substantially all risks and rewards of the asset are transferred to the Council. The asset is capitalised and is subject to the same revaluation policy as other property, plant and equipment and is depreciated over the shorter of its estimated useful economic life or the lease period, with the outstanding lease obligations (net of interest) shown in payables. Finance charges are charged to the statement of comprehensive net expenditure over the period of the agreement in accordance with the interest rate within the contract.

v. Operating leases

Operating lease rentals are charged to the statement of comprehensive net expenditure on a straight line basis over the period of the lease.

w. Key judgements and decisions

The preparation of Financial Statements requires management to make key judgements and estimates. These affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the Financial Statements and the reported amounts of revenues and expenses during the reporting period.

On an on-going basis, management evaluates its judgements and estimates, including those relating to property, plant and equipment and provisions.

Management bases its judgements and estimates on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about the carrying value of assets and liabilities that are not readily available from other sources. Actual results may differ from these estimates under different assumptions and conditions. Specific policies for judgemental areas such as decommissioning costs and provisions are shown on the previous page.

2. Analysis of net expenditure by business units for 2013-14

NERC's primary operating segments are business units which correspond with the way NERC is organised and managed.

NERC's assets and liabilities are shared across all business units and consequently it is not necessary to separately identify which segment they relate to to permit disclosure of this information.

	British Antarctic Survey £000	British Geological Survey £000	Centre for Ecology and Hydrology £000	National Oceanography Centre £000	Science and Innovation £000	Responsive Mode £000	Other £000	Total £000
Expenditure								
Staff costs	21,561	28,479	21,229	23,056	-	-	11,356	105,681
Staff early retirements	-	-	-	-	-	-	888	888
Grants and training	445	1,097	1,421	1,333	112,359	85,257	228	202,140
Other operating costs	28,525	14,772	11,277	22,484	8,992	202	12,096	98,348
Depreciation	-	-	-	-	-	-	30,681	30,681
Amortisation	-	-	-	-	-	-	88	88
Losses and Impairments of joint ventures and investments	-	-	-	-	-	-	49	49
Internal transfers ⁽ⁱ⁾	(6,662)	(3,282)	(5,160)	(8,964)	15,771	10,780	(2,483)	-
Impairment of property, plant and equipment	-	-	-	-	-	-	1,472	1,472
Total expenditure	43,869	41,066	28,767	37,909	137,122	96,239	54,375	439,347
Income ⁽ⁱⁱ⁾	(6,189)	(20,388)	(11,660)	(10,801)	(15,330)	(742)	(1,882)	(66,992)
Net operating costs	37,680	20,678	17,107	27,108	121,792	95,497	52,493	372,355

Notes:

- (i) Internal transfers result from sharing of resources, internal trading and internal awards between business units. The overall net impact on the organisation is zero.
- (ii) Business units receive external funding for research from the UK public sector; European Commission and private sector. In addition they receive other operating income, such as software and data sales and royalties and license fees from intellectual property.

Analysis of net expenditure by business units for 2012-13

	British Antarctic Survey £000	British Geological Survey £000	Centre for Ecology and Hydrology £000	National Oceanography Centre £000	Science and Innovation £000	Responsive Mode £000	Other £000	Total £000
Expenditure								
Staff costs	21,293	29,015	20,403	23,156	18	123	11,820	105,828
Staff early retirements	-	-	-	-	-	-	8,255	8,255
Grants and training	228	669	805	285	84,747	83,926		170,660
Other operating costs	26,714	12,963	11,887	19,821	9,990	12	11,386	92,773
Depreciation	-	-	-	-	-	-	28,672	28,672
Amortisation	-	-	-	-	-	-	59	59
Losses and Impairments of joint ventures and investments	-	-	-	-	-	-	2,278	2,278
Internal transfers ⁽ⁱ⁾	(4,241)	(3,040)	(4,897)	(9,413)	13,633	11,243	(3,285)	-
Impairment of property, plant and equipment	-	-	-	-	-	-	5,359	5,359
Total expenditure	43,994	39,607	28,198	33,849	108,388	95,304	64,544	413,884
Income	(5,264)	(18,841)	(11,631)	(8,367)	(13,319)	(830)	(1,468)	(59,720)
Net operating costs	38,730	20,766	16,567	25,482	95,069	94,474	63,076	354,164

3. Grant-in-aid and other BIS funding

The table below shows a summary of the grants and grant-in-aid, which have been transferred to the income and expenditure reserve during 2013-14:

	2014 £000	2013 £000
Grant-in-aid received:		
Resource	311,408	317,196
Capital ⁽ⁱ⁾	49,445	36,600
	360,853	353,796
BIS notional costs ⁽ⁱⁱ⁾	5,890	-
Other BIS funding ⁽ⁱⁱⁱ⁾	127	120
	366,870	353,916

Notes

- (i) Grant-in-aid received for capital for 2013-14 has been adjusted downwards by £7.855m for the cash received in 2012-13 for the purchase of the shares of SSC.
- (ii) Consists of notional costs for UK SBS operational services to NERC that are now paid directly by BIS to UK SBS (UK SBS operational service costs for 2012-13 of £7.180m were paid for out of Grant-in-aid).
- (iii) This relates to other non-GIA funding received from BIS for specific programmes, including the Water Security Knowledge Exchange Programme.

4. Income

	2014 £000	2013 £000
(a) Income from government departments		
Department for Environment Food and Rural Affairs	5,399	6,460
Ministry of Defence	346	341
Department for Energy and Climate Change	1,470	1,934
Department for International Development	4,939	3,006
Department of Enterprise, Trade and Investment Northern Ireland	1,132	1,267
Foreign and Commonwealth Office	587	648
Department for Communities and Local Government	70	119
Total income from government departments	13,943	13,775
(b) Income from other bodies		
European Community ⁽ⁱ⁾	5,180	4,869
Other Research Councils	8,620	7,351
Other Public Sector	8,773	6,516
Private Sector	17,742	15,688
Total income from other bodies	40,315	34,424
Other operating income		
Software and Data Sales	460	374
Sale of Products & Publications	409	272
Property and Equipment Rentals	2,107	1,761
Lecture fees, seminars and training courses	40	54
Royalties and licence fees	2,412	2,247
Other Income ⁽ⁱⁱ⁾	7,306	6,813
Total other operating income	12,734	11,521
Total income	66,992	59,720

Notes:

(i) Income from the European Community consists of cash receipts of £7,639k and net deferred income of £2,459k.

(ii) This includes £2,104,568 (2012-13 £2,926,532) of monies from the University of Southampton paid to the National Oceanography Centre concerning their joint occupation of the Waterfront Campus.

5. Salaries and wages

(a) Staff numbers

The average number of FTE's (Full Time Equivalent) of staff employed during the year was:

	2014 No.	2013 No.
Permanent Staff	2,032	2,136
Temporary and Contract Staff	270	194
Staff on inward secondment/loan	4	2
Agency	22	20
	2,328	2,352

The total number of staff reported in the Annual Report is based on head count as at 31 March 2014, whereas the above figures are average FTE's for the year.

(a) Staff costs

	2014 £000	2013 £000
Salaries and wages	79,801	80,047
Social Security Costs	6,667	6,783
Other pension costs (note 5d) ⁽ⁱ⁾	19,213	18,998
	105,681	105,828

Notes:

(i) Pension costs have risen due to an increase in employee scheme members following the introduction of automatic enrollment of employees in pension schemes (see note 5(d) below).

Temporary, contract and seconded staff costs totalling £361,959 (2012-13: £457,184) and Agency costs of £1,216,525 (2012-13: £1,116,418) have been included in operating costs.

The total amount capitalised for staff costs in 2013-14 is £234,900 (2012-13: £677,009). This relates to an estimated 5.87 full time equivalents for those staff employed by NERC that are adding value to assets such as those engaged in project managing or building of assets.

(c) Remuneration to Council and Committee Members/Peer Review College

	2014 £000	2013 £000
Council Members' fees	87	97
Committee Members/Peer Review	124	123
Other emoluments	21	40
	232	260

The following are included in staff costs, note 5(b) and other operating costs, note 8.

Committee members may receive £170 per day (2012-13: £170).

Committee Chairs may receive £230 per day (2012-13: £230).

The Chair of the Science & Innovation Strategy Board receives £9,110 per annum (2012-13: £9,110).

Non-Executive Board Members receive £4,000 per annum (new position in Research Centres).

Non-Executive Directors receive £10,000 per annum (2012-13: £10,000).

All emoluments are non-pensionable.

Council Members are normally employed on fixed term contracts not exceeding 4 years.

Peer Review College Chairs receive honoraria of £1,000 per annum (2012-13: £1,000). Peer Review College members previously received honoraria of £500 per annum, however from July 2012, those who are eligible for payment (not already Government employed), and elect to be remunerated, are paid £200 per meeting.

Peer Review College Chair and Member appointments are open-ended but reviewed annually; the College year runs from 1 July to 30 June.

For the Research Excellence Evaluation of NERC Centres, members of the Impact Panel received £170 per day and the Chair £230 per day whilst members of the Research Excellence Panel received £200 per day and the Chair £250 per day.

Number of Council, Committee and Board Members as at 31 March

	2014 No.	2013 Restated (i) No.
Council Members*	16	17
Committee Members^	87	53
Peer Review College Members~	741	673
	844	743

* includes Chief Executive and Chairman

^ Members of Audit Committee, Executive Board, Science and Innovation Strategy Board, Training Advisory Group (formed May 2012) & Individual Merit Promotion Panel. Also includes members of the Research Excellence and Impact Panels assembled for the 2013 Research Excellence Evaluation. Members of council or multiple committees are only counted once.

~ Not all members will attend meetings during the year, college expanded in July 2012.

Notes:

(i) Committee Members number restated to include NERC Executive Board.

Council* / Committee and Peer Review College Members' emoluments fell into the following bands:

	2014 No.	2013 No.
£0	604	313
£1 to £5,000	228	417
£5,001 to £10,000	11	12
£10,001 to £15,000	-	-
£15,001 to £20,000	1	1
	844	743

* Neither the Chief Executive nor the members of Council who are also Civil Servants receive any remuneration for their work on NERC Council and are therefore excluded from this table as are other unremunerated Committee and College members. The Chief Executive's emoluments are disclosed separately in the remuneration report.

(d) Superannuation

Pension scheme payments

	2014 £000	2013 £000
Payments in respect of the Research Councils' Pension Scheme (RCPS)	19,046	18,812
Payments to pension schemes other than the RCPS:		
Merchant Navy Officers' Pension Fund	28	31
Merchant Navy Officers' Pension Plan	-	-
Merchant Navy Ratings' Pension Fund	2	2
Merchant Navy Ratings' Pension Plan	2	2
Partnership Pensions	135	151
	19,213	18,998

Most employees of NERC are members of the Research Councils' Pension Scheme (RCPS) which is a defined benefit scheme funded from annual grant-in-aid on a pay-as-you-go basis. The RCPS is in all respects 'by-analogy' with the Principal Civil Service Pension Scheme, except that the employer's contribution is determined separately. The scheme provides retirement and related benefits based on final or average emoluments. Redundancy and injury benefits are administered and funded by the Council. The scheme is administered by the Research Councils' Joint Superannuation Service with the associated grant-in-aid managed by BBSRC.

Employees may be in one of four defined benefit scheme arrangements; either a 'final salary' scheme (classic, classic plus or premium); or a career average scheme (nuvos). Pensions payable are increased annually in line with changes in the Consumer Prices Index (CPI). The employer contribution rate is agreed by the RCPS Board of Management on the recommendation of the Government Actuary's Department (GAD) and is set at 26.0% of pensionable pay. Employee contribution rates vary between 1.5% and 8.85% depending on scheme and annual pensionable earnings (see table below). NERC paid costs in the year of £19,046,360 (2012-13: £18,811,664). As at 31 March 2014 there were 2,298 NERC members of these schemes (2,198 as at 31 March 2013).

In order that the defined benefit obligations recognised in the financial statements do not differ materially from those that would be determined at the reporting date by a formal actuarial valuation, the FReM requires that the period between formal actuarial valuations shall be four years, with approximate assessments in intervening years.

The last formal actuarial valuation undertaken for the RCPS as at 31 March 2006 was completed in 2008-09.

Subsequently however, formal actuarial valuations for unfunded public service pension schemes have been suspended by HM Treasury on value for money grounds while consideration is given to recent changes to public service pensions and while future scheme terms are developed as part of the reforms to public service pension provision. The primary purpose of the formal actuarial valuations is to set employer and employee contribution rates, and these are currently being determined under the new scheme design.

From 1 April 2014 employee contribution rates have been increased, the new rates are outlined below, along with those for the current year:

Annual pensionable earnings (full-time equivalent basis)	Classic Scheme contribution %		Classic Plus, Premium & NUVOS Scheme contribution %	
	1 April 2013	1 April 2014	1 April 2013	1 April 2014
Up to £15,000	1.50	1.50	3.50	3.50
£15,001 - £21,000	2.70	3.00	4.70	5.00
£21,001 - £30,000	3.88	4.48	5.88	6.48
£30,001 - £50,000	4.67	5.27	6.67	7.27
£50,001 - £60,000	5.46	6.06	7.46	8.06
Over £60,000	6.25	6.85	8.85	8.85

As an alternative to the RCPS a Partnership Pension Account was made available to new recruits from 1 October 2002. It is based on the portable Stakeholder Pension introduced by the Government in 2001. This is a defined contribution scheme. The employers pay the RCPS 0.8 percent of pensionable pay to cover death in service and ill health benefits. The employers pay an age related contribution to the employee's private pension provider. As at 31 March 2014 there were 40 NERC members of these schemes (42 as at 31 March 2013).

The accrued pension quoted is the pension the member is entitled to receive when they reach pension age or immediately on ceasing to be an active member of the scheme if they are already at or over pensionable age. Pensionable age is 60 for members of the classic, classic plus and premium scheme arrangements and 65 for members of Nuvos.

For further details about the Research Councils Pension Scheme pension arrangements can be found at the website <http://jsspensions.nerc.ac.uk/>.

The Council also paid contributions during the year to a number of other multi-employer pension schemes for specific groups of employees, as at 31 March 2014 there were 8 NERC members of these schemes (10 as at 31 March 2013); details of these schemes are shown below:-

Scheme	Rate of contribution	Year of last variation
Merchant Navy Officers' Pension Fund [^]	11.9%	2009
Merchant Navy Officers' Pension Plan	5.1%	n/a
Merchant Navy Ratings' Pension Fund*	2.0%	2012
Merchant Navy Ratings' Pension Plan	5.1%	n/a

[^] The Merchant Navy Officers' Pension Fund (New Section) was subject to an actuarial valuation as at 31 March 2009 and showed a deficit overall. In 2009-10 NERC made a one off payment of £2,817,513 in full settlement of our share of the deficit. The NERC element of the scheme is now fully funded and no liability in respect of the 31 March 2009 valuation is outstanding at 31 March 2014.

* The Merchant Navy Ratings' Pension Fund closed on 31 May 2001. On closure of the fund members transferred to the RCPS or the new Merchant Navy Ratings' Pension plan which is a money purchase scheme.

An actuarial valuation was undertaken on 31 March 2012; however the trustees do not intend to take immediate action on this report due to the on-going consultation process between the Trustee and the current employers concerning the details of the proposed Schedule of Contributions and Recovery Plan. The Trustee's current intention is to suspend collection of deficit contributions until the Court judgement on the proposed new deficit contribution regime is received in 2014. This decision is subject to the support of the Pensions Regulator.

NERC held a provision for our share of the deficit amounting to £2,449,582 in 2008-09 and made a one off payment in 2009-10 in full settlement of £2,724,138. At 31 March 2014 the NERC element of the scheme in respect of the 31 March 2008 valuation was fully funded and no current liabilities existed.

6. Staff restructuring / early retirements ⁽ⁱ⁾

Resource costs packages agreed	2014 £000	2013 £000
Redundancy compensation payments	577	4,704
Early retirement lump sums	309	1,047
Resource costs packages agreed ⁽ⁱⁱ⁾	886	5,751
Increase early retirement liability	2	2,504
Total costs	888	8,255

Exit package band	Exit package cost band	Number of compulsory redundancies	Number of other departures	Total number of exit packages by cost band
1	<£10k	-	10	10
2	£10k-£25k	-	23	23
3	£25k-50k	-	24	24
4	£50k-£100k	-	21	21
5	£100k-£150k	-	5	5
6	£150k-£200k	-	-	-
7	>£200k	-	-	-
Total packages agreed		-	83	83
		£000	£000	£000
Total resource costs packages agreed ⁽ⁱⁱⁱ⁾		-	3,258	3,258

Notes:

- (i) All payments were within contracted entitlement.
- (ii) Resource costs packages agreed net of release of provisions as per Note 14.
- (iii) Full costs of all exit packages agreed during the year, including those costs that are covered by the release of provisions as per Note 14. These costs will therefore differ from the totals shown in note (ii).

7. Grants and training

	£000	2014 £000	2013 £000
Research grants ⁽ⁱ⁾		120,087	107,695
Research contracts ⁽ⁱ⁾		61,312	41,846
Post Graduate training awards			
Research students	20,741		21,086
Research masters	-		33
		20,741	21,119
Total grants and training awards ^{(ii) (iii)}		202,140	170,660

Note:

- (i) Part of the increase in research grants and research contracts awarded during the year is due to a rise in capital grants, with research grants including capital grants of £6.394m (2012-13: £2.141m) and research contracts including capital grants of £16.161m (2012-13: £2.656m).
- (ii) Payments were made to various bodies within the public sector; public corporations, higher education institutions and other government agencies. A full list of all awards made during the year is available in the Annual Report section on pages 20-22. From October 2011 NERC discontinued funding for masters awards.
- (iii) The above figures include Research Institute funded Grants & Training totalling £4.296m.

8. Other operating costs

	2014 £000	2013 £000
Rent and rates	990	1,070
Maintenance, cleaning, heating and lighting	9,361	8,487
Office supplies, equipment, printing and stationery	4,791	3,057
Laboratory supplies and field equipment	11,375	12,159
Information Technology	7,395	6,630
Postage, telephone and other telecommunications	1,618	1,542
Hospitality ⁽ⁱ⁾	449	454
Audit fees ⁽ⁱⁱ⁾	80	80
Travel and subsistence	8,667	7,385
Ships and aircraft operations	20,815	20,413
External training	1,709	1,687
UK SBS operating costs ⁽ⁱⁱⁱ⁾	5,933	7,180
International subscriptions	3,250	4,839
Professional and research services by outside bodies ^(iv)	22,195	17,709
Decrease/ (increase) in allowance for receivables	(280)	81
	98,348	92,773

Notes:

- (i) Hospitality costs include room hire, accommodation and catering costs for meetings, workshops and conferences.
- (ii) The costs for audit fees consists of NAO statutory audit fee of £80k (2012-13: £80k).
- (iii) UKSBS operating costs for 2013-14 include notional costs of £5,890k for services such as procurement, information technology, finance, payroll, grants and recruitment that have been paid by BIS directly to UK SBS - see also Note 3.
- (iv) The cost for professional and research services by outside bodies includes RCUK charges, Research Library Costs and Cross-Council Research Activities.

9(a). Property, plant and equipment

Cost or valuation	Land, buildings and Antarctic stations (i) £000	Plant and equipment £000	Transport (ii) £000	Total £000
At 1 April 2013	313,892	72,868	190,277	577,037
Additions	1,265	13,174	11,777	26,216
Capitalisation (iii)	1,695	1,871	71,097	74,663
Revaluation	15,560	3,301	21,550	40,411
Reclassification (iv)	(4,237)	-	-	(4,237)
Disposals	(23)	(7,110)	(703)	(7,836)
Impairment (v)	(627)	-	(1,299)	(1,926)
At 31 March 2014	327,525	84,104	292,699	704,328
Depreciation				
At 1 April 2013	106,925	32,440	110,920	250,285
Charge for the year	8,586	11,088	11,007	30,681
Revaluation	4,875	1,000	8,369	14,244
Reclassification (iv)	(1,867)	-	-	(1,867)
Disposals	(20)	(7,006)	(514)	(7,540)
Impairment (v)	(270)	-	(229)	(499)
At 31 March 2014	118,229	37,522	129,553	285,304
Net Book Value				
At 31 March 2014	209,296	46,582	163,146	419,024
At 1 April 2013	206,967	40,428	79,357	326,752

Notes:

- (i) Cost / Valuation includes £20,658,360 in respect of Freehold Land which is not depreciated (2012-13: £19,197,265).
- (ii) The NBV of the leased ship is £17,845,247 (2012-13: £16,393,899). The annual depreciation charge on this asset held under the finance lease was £3,215,919 (2012-13: £2,549,158).
- (iii) Transport capitalisation includes £71,097,083 relating to the bringing into service of the new RRS *Discovery* Research Vessel.
- (iv) During the year the former Core Store at Gilmerton Road Edinburgh was reclassified to assets held for sale prior to its sale in December 2013, in addition the former NOCL building at Kempston Street Liverpool was reclassified to assets held for sale as at 31 March 2014, prior to its sale in April 2014.
- (v) The impairment of Land & Buildings relate to a correction of a previous impairment of the Keyworth Site relating to a misapportionment of asset values when the assets were migrated to the current Oracle system in 2010. The impairments of Transport equipment amount reflect the following aircraft being impaired to their professionally revalued amounts:
 - BAS Dash 7 Aircraft (£784,928).
 - ARSF Dornier D0228-101 Aircraft (£285,199).

Cost or valuation	Land, buildings and Antarctic stations £000	Plant and equipment £000	Transport £000	Total £000
At 1 April 2012	284,259	63,826	238,807	586,892
Additions	46,352	17,185	2,536	66,073
Revaluation	(4,354)	5,316	1,372	2,334
Revaluation Adjustment	(1,250)	-	-	(1,250)
Disposals	(90)	(13,459)	(52,438)	(65,987)
Impairment	(11,025)	-	-	(11,025)
At 31 March 2013	313,892	72,868	190,277	577,037
Depreciation				
At 1 April 2012	105,817	32,891	153,167	291,875
Charge for the year	8,907	11,564	8,201	28,672
Revaluation	(977)	1,163	388	574
Revaluation Adjustment	(1,104)	-	-	(1,104)
Disposals	(52)	(13,178)	(50,836)	(64,066)
Impairment	(5,666)	-	-	(5,666)
At 31 March 2013	106,925	32,440	110,920	250,285
Net Book Value				
At 31 March 2013	206,967	40,428	79,357	326,752
At 1 April 2012	178,442	30,935	85,640	295,017

9(b). Assets Under the Course of Construction

Cost or valuation	Land, buildings and Antarctic stations £000	Plant and equipment £000	Transport ⁽ⁱ⁾ £000	Total £000
At 1 April 2013	1,693	2,234	70,504	74,431
Additions	1,684	7,921	1,782	11,387
Capitalisation	(1,695)	(1,871)	(71,097)	(74,663)
At 31 March 2014	1,682	8,284	1,189	11,155

Notes:

(i) Transport capitalisation entirely relates to the bringing into service of the new RRS *Discovery* research vessel.

Cost or valuation	Land, buildings and Antarctic stations £000	Plant and equipment £000	Transport £000	Total £000
At 1 April 2012	50,070	6,837	49,689	106,596
Additions	(935)	1,568	21,777	22,410
Capitalisation	(47,442)	(6,171)	(962)	(54,575)
At 31 March 2013	1,693	2,234	70,504	74,431

9(c). Jointly Controlled Entities and Unlisted Investments

Cost or valuation	'NGD' share UKSBS Ltd (previously 'A' share RCUK SSC) £	'B' shares RCUK Shared Services Centre £	IGS Ltd Shares £	IXO Therapeutics Ltd Shares £	Total £
At 1 April 2012	1	9,832,763	124,969	300,000	10,257,733
Impairment	-	-	-	(300,000)	(300,000)
Losses	-	(1,977,856)	-	-	(1,977,856)
Shares sold	-	(7,854,907)	-	-	(7,854,907)
At 31 March 2013	1	-	124,969	-	124,970
Impairment	-	-	(48,953)	-	(48,953)
Losses	-	-	-	-	-
Shares sold	-	-	-	-	-
At 31 March 2014	1	-	76,016	-	76,017

RCUK Shared Services Centre Investment

RCUK SSC UK Ltd was accounted for as a joint venture until the change in governance and ownership of the company on 6 March 2013. Under the new arrangement the company's name was changed to UK Shared Business Services Limited (UK SBS Ltd).

At 31 March 2014 BIS hold both a Government Department ('GD') share carrying 51% of the votes and the deferred Employee Engagements share (previously held by UK SBS Ltd) carrying 5% of the votes. All other stakeholders including NERC each own one Non-Government Department ('NGD') share, with the combined voting value of all the 'NGD' shares being 44%.

The NERC one 'NGD' share in UK SBS Ltd means that since March 2013 NERC no longer have joint ownership of the company and its shareholding was reclassified as an unlisted investment with an initial cost of £1 being the nominal value of the 'NGD' share.

Other investments

NERC has one shareholding in an unlisted undertaking IGS Ltd, in which it holds a non-controlling interest of 19.56% (2012-13: 22.64%). The shareholding has been impaired to reflect the NERC share of 19.56% of the shareholders fund as per IGS Ltd accounts for the year ended 31 December 2013.

The investment in IXO Therapeutics Ltd had been impaired to fair value (nil) during the 2012-13 financial year and the company was liquidated on 27 November 2013.

Unlisted Investments

NERC holds shares or membership status in the following unlisted ventures whose accounts, by virtue of NERC's non-controlling interest or the relative financial immateriality of these entities, are not consolidated into NERC's financial statements.

Venture	Market Sector	Equity	Remarks
UK Shared Business Services Limited (UK SBS Ltd)	Shared Services	4.89%	See above
International Geosciences (IGS) Ltd	International geoscience and geothematic surveys	19.56%	During 2013-14 an additional 1,562 shares were issued diluting the NERC shareholding to 19.56%. NERC has impaired its investment to £79,016 as fair value for this entity.
Wallingford Hydrosolutions Ltd	Consultancy and environmental software systems	24.90%	
Microbial Solutions Ltd	Wastewater treatment technology	25.24%	46,750 new shares were issued during 2013-14 diluting the NERC share holding to 25.24%.
Spectrum (General Partner) Ltd	Advisory board to Rainbow Seed Fund which provides early stage funding for commercialisation of technology and services	18.75%	Dormant
Oxford Expression Technologies Ltd	Products and services to pharmaceutical and biotechnology industries	13.51%	

Unlisted Investments dissolved during the year

Gordons I Limited, in which NERC held a 0.05% shareholding, was dissolved on 20 August 2013.

10. Intangible Fixed Assets

Cost or Valuation	Software Licenses £000
At 1 April 2013	295
Additions	177
Revaluation	7
Disposals	(104)
At 31 March 2014	375
Amortisation	
At 1 April 2013	178
Amortisation for the year	88
Revaluation	2
Disposals	(104)
At 31 March 2014	164
Net Book Value At 31 March 2014	211
At 1 April 2013	117

Cost or Valuation	Software Licenses £000
At 1 April 2012	358
Additions	-
Revaluation	7
Disposals	(70)
At 31 March 2013	295
Amortisation	
At 1 April 2012	186
Amortisation for the year	59
Revaluation	3
Disposals	(70)
At 31 March 2013	178
Net Book Value At 31 March 2013	117
At 1 April 2012	172

II. Assets held for sale

	Bidston site ⁽ⁱⁱⁱ⁾ £000	Gilmerton Core Store ⁽ⁱⁱ⁾ £000	Kempston Street site ⁽ⁱ⁾ £000	Total £000
Net cost or valuation				
At 1 April 2013	70	-	-	70
Transfer in	-	2300	70	2,370
Revaluation	(25)	-	-	(25)
Disposal	-	(2,300)	-	(2,300)
Impairment	(45)	-	-	(45)
Net Book Value at 31 March 2014	-	-	70	70
Net cost or valuation				
At 1 April 2012	69	-	-	69
Adjustment	1	-	-	1
Net Book Value at 31 March 2013	70	-	-	70
Net Book Value at 1 April 2012	224	-	-	224

Notes:

- (i) Buildings and land owned at the Kempston Street site, Liverpool.
These assets were re-classified from the property, plant and equipment category to held for sale at 31 March 2014 and the sale of this property was subsequently completed during April 2014.
- (ii) During 2013-14 the former Core Store at Gilmerton Road Edinburgh was transferred to assets held for sale prior to its sale in December 2013.
- (iii) During 2013-14 the buildings and land owned at the Bidston site was revalued to nil as it is no longer probable that the disposal of this site will result in any net proceeds for NERC, this revaluation included a £45k impairment of the Proudman plots. NERC is actively working with the Cabinet Office to dispose of the property.

12. Receivables

	2014 £000	2013 £000
Current assets: trade and other receivables		
Trade receivables ⁽ⁱ⁾	9,622	10,993
Other receivables	1,209	1,439
Prepayments ⁽ⁱⁱ⁾	5,882	4,967
Accrued income	10,141	7,635
Provision for receivables	(147)	(426)
	26,707	24,608
Non-current receivables: trade and other receivables		
Other receivables	75	90
Total receivables	26,782	24,698

Intragovernment balances: current and non-current assets

Private Sector	19,491	18,244
Central Government Bodies	7,182	6,367
Local Authorities	109	87

Total receivables	26,782	24,698
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Notes

- (i) NERC debtor days are 52 days (2012-13: 67 days). Percentage of debt over 90 days is 5.8% (2012-13: 19.1%).
- (ii) Prepayments are due to contracted obligations, such as research grants, international subscriptions, license & maintenance costs and Integrated Ocean Drilling Programme subscription costs.

13. Payables

	2014 £000	2013 £000
Current liabilities: trade and other payables		
Trade payables	8,660	3,547
Other payables	161	219
Taxation & Social Security	2,122	2,149
VAT payable	733	524
Accruals	36,524	42,629
Deferred income	22,333	17,611
Obligation under finance leases	1,594	1,667
	72,127	68,346
Non-current liabilities: trade and other payables		
Obligation under finance leases	5,790	7,097
Total payables	77,917	75,443
 Intragovernment balances: current and non-current payables		
Private Sector	64,857	62,643
Central Government Bodies	13,056	12,798
Local Authorities	4	2
Total payables	77,917	75,443

14. NERC Provisions for liabilities and charges ⁽ⁱ⁾

	Antarctic Treaty costs ⁽ⁱⁱ⁾ £000	Early retirements £000	Other liabilities ⁽ⁱⁱⁱ⁾ £000	CEH restructuring ^(iv) £000	Total £000
Provision at 31 March 2012	6,002	2,210	711	2,300	11,223
Changes in provisions for 2012-13:					
Change in discount rate	443	17	8	84	552
Write back of provisions not required	(268)	-	(300)	(41)	(609)
Amounts provided in year	-	2,504	95	232	2,831
Unwinding of discount	218	62	16	59	355
Provision utilised in year	(1,573)	(1,750)	(279)	(654)	(4,256)
Provision at 31 March 2013	4,822	3,043	251	1,980	10,096
Changes in provisions for 2013-14:					
Change in discount rate	(23)	23	-	23	23
Write back of provisions not required	(36)	-	-	(18)	(54)
Amounts provided in year	-	2	9	-	11
Unwinding of discount	44	71	(4)	21	132
Provision utilised in year	-	(2,792)	(39)	(596)	(3,427)
Provision at 31 March 2014	4,807	347	217	1,410	6,781

Notes:

- (i) The discount rate used is 1.80% for pension provisions (2012-13: 2.35%). For all other provisions the discount rate is -1.9% for 0-5 years, -0.65% for 6-10 years and 2.2% for over 10 years (2012-13: -1.8% for 0-5 years, -1% for 6-10 years and 2.2% for over 10 years).
- (ii) Antarctic Treaty costs represent the Council's liability to remove any items from the Antarctic no longer used.
- (iii) Other liabilities include claims made against NERC and costs for vacated sites.
- (iv) CEH restructuring costs include NERC's liability for CEH staff restructuring and staff removal costs.

Analysis of expected timing of discounted cashflows

	Antarctic Treaty costs £000	Early retirements £000	Other liabilities £000	CEH restructuring £000	Total £000
Provision due within one year	-	(89)	217	491	619
Between one and five years	779	424	-	847	2,050
Between five and ten years	1,244	12	-	72	1,328
Thereafter	2,784	-	-	-	2,784
Provision at 31 March 2014	4,807	347	217	1,410	6,781
Provision due within one year	-	2,742	251	616	3,609
Between one and five years	1,025	235	-	1,241	2,501
Between five and ten years	1,013	66	-	123	1,202
Thereafter	2,784	-	-	-	2,784
Provision at 31 March 2013	4,822	3,043	251	1,980	10,096

15. Cash and cash equivalents

	2014 £000	2013 £000
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The following balances were held at 31 March:

Government Banking Service

National Westminster clearing accounts	(24)	(2,279)
Citibank	9,070	22,231
	9,046	19,952

Commercial bank accounts

Lloyds TSB	253	1,587
National Bank of Abu Dhabi	297	328
Other local commercial accounts	91	95
	641	2,010

Balance at 31 March 2014 ⁽ⁱ⁾	9,687	21,962
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Notes:

(i) In addition to the above NERC holds the following monies on behalf of 3rd parties: £5,784,756 (2012-13: £3,750,305) held on behalf of EU Programme Collaborators, NERC currently holds no funds on behalf of the Integrated Ocean Drilling Programme Collaborator (2012-13: £4,810,288).

16. Forward commitments on approved research grants, research contracts and studentships

	Research Grants £000	Postgraduate Training £000	Fellowships £000	Contracts £000	Total 2014 £000
2014-2015	122,957	14,934	7,522	37,705	183,118
2015-2016	71,485	11,764	4,218	5,594	93,061
2016-2017	34,603	5,922	2,964	4,665	48,154
2017-2018	9,857	244	2,386	1,835	14,322
2018-2019	2,265	-	1,090	1,192	4,547
2019-2020	-	-	-	167	167
	241,167	32,864	18,180	51,158	343,369

17. Amounts payable under finance lease obligations

	Payments £000	Interest £000	Net payments £000
As at 31 March 2014			
Within one year	2,134	540	1,594
Between one and five years	6,384	1,117	5,267
Thereafter	532	9	523
	9,050	1,666	7,384
As at 31 March 2013			
Within one year	2,334	667	1,667
Between one and five years	6,630	1,541	5,089
Thereafter	2,128	120	2,008
	11,092	2,328	8,764

Note:

Due to the lessor no longer taking up the option to lease back the vessel in the summer months, the obligation has been adjusted upwards to include the full discounted value of future lease payments, instead of payments less agreed leaseback income. This resulted in an increase in the obligation of £1.102m as at 1 April 2013.

18. Related party transactions

The Natural Environment Research Council (NERC) is a Non-Departmental Public Body (NDPB) sponsored by the Department for Business, Innovation and Skills (BIS).

BIS is regarded as a related party. During the year, NERC has had various material transactions with BIS and with other entities for which BIS is regarded as the parent Department, viz: Engineering and Physical Sciences Research Council, Biotechnology and Biological Sciences Research Council, Science and Technology Facilities Council, Medical Research Council, Economic and Social Research Council, the Arts and Humanities Research Council, the Technology Strategy Board, the Higher Education Funding Council for England and the UK Space Agency.

NERC has had various material transactions with other Government departments and other central Government bodies. NERC has also entered into various transactions with the UK Shared Business Services Ltd.

During the year, NERC entered into the following material transactions with Council members in respect of payments under awards or contracts funded by NERC.

Council Member	Number of Awards or Contracts	Amount £
Professor L Heathwaite	1	84,123
Professor G Mace CBE	1	3,898
Professor P Monks	6	313,553
Professor A Watson	3	414,339

None of the above mentioned related parties were involved in the approval of awards to the Institution where he/she is a senior member of the staff.

In addition, NERC made the following aggregated payments in respect of NERC funded awards or contracts to Institutions where Council members are also senior members of staff.

Related Party	Institution	Amount £000
Professor L Heathwaite	Lancaster University	2,674
Professor P Curran	City University London	5
Professor Dame Julia Slingo DBE	Met Office	838
Professor G Mace CBE	University College London	5,091
Professor A Watson	University of Exeter	6,574
Professor M Wilson	University of Leeds	16,008
Professor P Monks	University of Leicester	1,944
Professor C Godfray CBE	University of Oxford	9,010
Professor M Lockwood	University of Reading	11,192
Professor I Boyd	University of St Andrews	3,727
Professor T Meagher		

19. Losses and special payments

NERC has no notifiable losses to report for the year.

20. Capital, lease and other commitments

Lease commitments

	Buildings £000	Other £000	2014 Total £000	Buildings £000	Other £000	2013 Total £000
Within one year	229	66	295	230	85	315
Between one and five years	161	106	267	164	14	178
Between five and ten years	118	-	118	117	-	117
Over ten years	629	-	629	652	-	652
	1,137	172	1,309	1,163	99	1,262

Capital commitments

As at the date of these accounts, NERC is committed to a sum of £1.945m in respect of capital contracts. This includes various equipment, such as transducer arrays for the amount of £447k, all due to be completed within 2014-15.

International subscriptions

NERC has a commitment of £1.950m for the Integrated Ocean Drilling Programme subscription costs for the period 31 December 2014.

Bonds and guarantees

The Council has a number of bonds and guarantees that are lodged with Lloyds Bank and relate to overseas contracts, amounting to £1,865,617 at 31 March 2014 (2012-13: £823,950). The costs of these bonds and guarantees are born by external customers.

21. Contingent liabilities

The value of contingent liabilities at 31 March 2014 of legal claims made against NERC where based on legal advice sought it is not deemed probable that these will lead to future outflows of resources, is estimated at £127k (2012-13 £12k).

22. Events after the reporting period

In accordance with the requirements of IAS 10 'Events After the Reporting Period', post Statement of Financial Position events are considered up to the date on which the Accounts are authorised for issue. This is interpreted as the same date as the date of the Certificate and Report of the Comptroller and Auditor General. There are no post Statement of Financial Position events between the balance sheet date and this date.

23. Derivatives and other financial instruments

IFRS 7 Financial Instruments – Disclosures, IFRS 32 Financial Instruments – Presentation and IFRS 39 Financial Instruments – Recognition and Measurement require disclosure of the role which financial instruments have had during the period in creating or changing the risks an entity faces in undertaking its activities. Due to the largely non-trading nature of its activities and the way it is financed, the Council is not exposed to the degree of financial risk faced by non-public sector entities. Moreover, financial instruments play a much more limited role in creating or changing risk than would be typical of the listed companies to which IFRS 7, 32 and 39 mainly apply. The Council has limited powers to borrow or invest funds and except for the finance lease contract (details of which are given in notes 1(v), 9(a) and (17), financial assets and liabilities are generated by operational activities and are not held to change the risks facing the Council in undertaking its activities.

Liquidity risk

The Council's net revenue resource requirements are financed by grant-in-aid from its sponsor department, the Department for Business, Innovation and Skills. The capital expenditure, with the exception of the ship financed under the finance lease referred to above, is also financed through grant-in-aid. The Council is therefore not exposed to significant liquidity risks.

Interest rate risk

The Council is not exposed to significant interest rate risk.

Foreign currency risk

NERC is subject to foreign currency risk through the maintenance of bank accounts in foreign currencies (predominantly the EUR and the USD) to deal with overseas transactions. At the 31 March 2014 NERC held £5.3m denominated in EUR and £0.2m denominated in USD. A shift of +/-5% in the EUR/GBP foreign exchange rate would result in an unrealised foreign exchange gain or loss of £0.3m. A shift of +/-5% in the USD/GBP foreign exchange rate would not result in a material unrealised foreign exchange gain or loss.



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