

COUNCIL MEETING

Two hundred and Eighty Third meeting of NERC Council
to be held at CEH Edinburgh on
Wednesday 2nd and Thursday 3rd July 2008.

Natural Environment Research Council

NATURAL ENVIRONMENT RESEARCH COUNCIL

Two hundred and eighty third meeting of NERC Council, to be held in the Leven Room, CEH Edinburgh, Bush Estate, Penicuik, Midlothian on Wednesday 2nd and Thursday 3rd July 2008.

AGENDA - Day 1

15:00 Council members arrive at CEH Edinburgh

Standing items

- | | | | |
|---|-------|--|----------------|
| 1 | 15:10 | Welcome and introduction | Oral |
| 2 | 15:15 | Executive Report | NERC 08/31 (P) |
| 3 | 15:55 | Unconfirmed minutes of the 282 nd meeting of Council held on 8 th May 2008 | NERC 08/32 (P) |
| 4 | 16:00 | Decisions and Actions and Matters Arising from the Minutes of the 282 nd meeting | NERC 08/33 (P) |
| | 16:10 | Refreshments | |
| | 16:25 | CEH Presentation to Council | |
| | 17:25 | Science based tour of building | |
| | 18:30 | Coach transport to hotel (Parliament House Hotel) | |
| | 19:30 | Pre-dinner drinks at hotel | |
| | 20:00 | Council Dinner | |

NATURAL ENVIRONMENT RESEARCH COUNCIL

Two hundred and eighty third meeting of NERC Council, to be held in the Leven Room, CEH Edinburgh, Bush Estate, Penicuik, Midlothian on Thursday 3rd July 2008 commencing at 09.00.

AGENDA - Day 2

Introductory items

Strategic
Objective

- | | | | | |
|---|-------|-------------------------------------|----------------|--|
| 5 | 09:00 | Chairman's welcome and introduction | Oral | |
| 6 | 09:05 | Financial forecast and context | NERC 08/34 (P) | |

Item for decision

- | | | | | |
|---|-------|------------------------------|----------------|--------|
| 7 | 09:15 | Theme Action Plans | NERC 08/35 (P) | 5 - 11 |
| | 11:00 | Break for refreshments | | |
| | 11:15 | Theme Action Plans continued | | |
| | 12:40 | Lunch | | |

Items for discussion

- | | | | | |
|----|-------|--|----------------|----|
| 8 | 13:10 | Strategic Management Tool (First Quarterly report) | NERC 08/36 (P) | 18 |
| 9 | 13:55 | NERC Approach to next Government Spending Review | NERC 08/37 (P) | |
| 10 | 14:10 | Annual Delivery Report | NERC 08/38 (P) | 18 |
| | 14:20 | Break for refreshments | | |

Standing items

- | | | | | |
|----|-------|---|----------------|--|
| 11 | 14:30 | Discussion regarding presentation to Council on 2 nd July 08 | Oral | |
| 12 | 14:45 | Report of the Council Audit Committee meeting | | |
| | | i) Confirmed minutes of April 2008 meeting | NERC 08/39 (P) | |
| | | ii) Draft minutes of June 2008 meeting | NERC 08/40 (P) | |
| | | iii) Council Audit Committee Review of Capital Expenditure Forecasting | NERC 08/41 (P) | |
| 13 | 15:10 | Science and Innovation Strategy Board report | NERC 08/42 (P) | |
| 14 | 15:30 | Rolling programme of Business | NERC 08/43 | |
| 15 | 15:40 | Any other business | Oral | |
| | 16:00 | Meeting close | | |

Papers for Information:

- i) **Update on Business Cycles – NERC 08/44**
- ii) **FAB Update - NERC 08/45 (P)**
- iii) Common NERC Acronyms
- iv) Membership of Council 2007/2008
- v) Attendance at NERC Council 2007/2008
- vi) The Mission of the NERC
- vii) Council Policy on Vested Interests
- viii) SMT Top level objectives

NERC COUNCIL

EXECUTIVE REPORT JULY 2008

Issue

1. This standing item provides information to Council on key business issues that are not addressed elsewhere in the papers under the following headings:
 - i. Strategy and Partnerships;
 - ii. Science Delivery;
 - iii. People, Skills and Communications;
 - iv. Finance and Operations;
 - v. Shared Service Centre;
 - vi. Health and Safety
 - vii. Halley VI progress
 - viii. NERC Research Centres and NOCS;
 - ix. Chief Executive's Activities

Discussion led by

2. Professor Alan Thorpe, NERC CE

Information for paper collated by

3. Samantha Way, Secretary to NERC Council, sway@nerc.ac.uk, 01793 442570

Annexes

4. The following annexes are attached:
 - Annex A – Financial Outturn 2007/08
 - Annex B – NERC Risk Register
 - Annex C – Halley VI Update

Action

5. Council is invited to **NOTE** the report.

NERC COUNCIL

EXECUTIVE REPORT JULY 2008

Items highlighted in grey should be treated as Management in Confidence

I. STRATEGY AND PARTNERSHIPS

a) *Knowledge Exchange*

The Knowledge Exchange Group is reorganising under two rather than three teams to bring the focus of the work more clearly into line with new SO Director structures and DIUS reporting needs. One team will focus on stakeholder partnerships and the other on commercialisation and innovation. As Council required, Knowledge Exchange (KE) Plans are one of the requirements in the major classes of NERC grants as from 1 July. High quality KE Plans will attract funding over and above what would be awarded for the science alone. The new approach is being phased in between 1 July and 1 December to help the academic community adjust. A new Science Impacts Database has been launched to help gather better information on the economic impact of NERC investments.

b) *UK-USA Atmospheric Science and Technology Initiative*

International collaboration in atmospheric science research and technology took a significant step forward on 6th June as the UK's National Centre for Atmospheric Science (NCAS) and the US' National Center for Atmospheric Research (NCAR) signed a memorandum of understanding (MoU) to work more closely on advancing atmospheric science and developing joint educational and training programmes. The agreement will run for 3 years (see http://www.ncas.ac.uk/communications/ncas_ncar_mou_june08.html).

c) *Technology Strategy Board*

Opportunities have been sought to strengthen the relationship between NERC and the Technology Strategy Board. Following discussions between Steven Wilson and Allyson Reed (Strategy Director for TSB), it is hoped that we will jointly work on a strategy to engage with business on climate and environmental change. This will help UK companies to strengthen their presence in the growing environmental sector, help business prepare for environmental change, and support partnerships between the business community and researchers.

d) *Joint Climate Research Programme*

Discussions with the Met Office on the implementation of the Joint Climate Research Programme continue. The main focus is on the handling of Intellectual Property, and progress is being made. NERC and Met Office have agreed to proceed with a set of joint posts, to kick off the partnership.

e) *National Capability Advisory Group (NCAG)*

The first meeting of NCAG, under the Chair of Dr Tony Rachwal, took place on 11th June. The meeting focussed on a discussion of how to properly describe NERC's portfolio of National Capability at a strategic level, a programme of reviews of our National Capability and the workplan for the year. The membership is:

NCAG membership

Mr Tony Rachwal	- Independent SISB Member (Chairman)
Dr Peter Costigan	- Science Co-ordinator, DEFRA
Dr Mike Daly	- Group Vice President, BP Exploration
Professor Julian Dowdeswell	- Director, Scott Polar Research Institute
Professor Robert Gurney	- Director ESSC, National Centre Earth Observation
Professor Ed Hill	- Director, National Oceanography Centre, Southampton
Professor Stephen Mobbs	- Director, National Centre for Atmospheric Science
Professor Pat Nuttall	- Director, Centre for Ecology & Hydrology
Professor Nick Owens	- Director, British Antarctic Survey
Professor Denis Peach	- Chief Scientist, British Geological Survey
Dr Klaus Schmidt	- Directorate of Space Programmes - Earth Observation, German Aerospace Centre
Professor Paul Valdes	- University of Bristol
Professor George Wolff	- University of Liverpool
Professor Alistair Lewis	- NERC Theme Leader, Technology (Ex-Officio member)
Dr Steven Wilson	- NERC Director, Science Strategy & Partnerships (Ex-Officio member)
Mr Mark Hinder	- NERC Business Coordination (Secretary)

II. SCIENCE DELIVERY

- a) See relevant paragraphs of section VIII (NERC Research Centres/NOCS).

III. PEOPLE, SKILLS AND COMMUNICATIONS

Communications

- a) *Press Releases (April – June 2008)*

Arctic adventurers return home

Fluctuating diet increases risk of sudden death

Amazon under threat from cleaner air

Major UK funders publish common rules for animal research

When following the leader can lead into the jaws of death

Scientists aim to unlock deep-sea secrets of Earth's crust

Gardens for the year 2050 at the Chelsea Flower Show

£2m to study earthquake region

Family feuds – why close relatives keep their distance in the animal kingdom

Parasites' family planning strategy helps malaria spread

Earthworm detectives provide genetic clues for dealing with soil pollution

Puffins added to the list of dwindling North Sea birdlife

'Family tree' of all British birds gives clues about which species might be endangered next

- b) *Publications (April – June 2008)*

Planet Earth summer 2008

Annual Report

Arctic research leaflet

Science Impacts database

Rapid climate change DVD

Science into Policy brochure (update)

Planet Earth online development

c) *Events (April - June 2008)*

30 April - CEH Strategy Launch at the Royal Society in London.

Guest speaker, Professor John Beddington, Chief Scientific Adviser to the Government and Alan Thorpe helped launch the 2008-2013 strategy, *Integrated Science for Our Changing World* to an audience of policy makers, NGOs and other key stakeholders.

20-24 May 2008 - Silver medal for climate change garden at the Chelsea Flower Show

The Tyndall Centre for Climate Change Research's exhibit (funded by NERC, EPSRC and ESRC) showing possible gardens of the future received a silver medal and was seen by many thousands of people at the show and many thousands more on television. The exhibit in the Chelsea Flower Show 2008's Lifelong Learning Pavilion showed the traditional English garden of the 1950s before looking to gardens of 2050 under different climate change scenarios.

8 June 2008 - Climate Engineering Debate at the Cheltenham Science Festival

Co-sponsored by NERC, this debate involved Jonathon Porritt, Robert Watson (Chief Scientific Advisor to Defra), Roland Clift (Founding Director of the Centre for Environmental Strategy at the University of Surrey), and environmental scientist Andrew Watson.

18 June 2008 - Living With Environmental Change (LWEC) programme launch event

The official launch of the Living With Environmental Change programme took place at the Queen Elizabeth II Conference Centre on 18 June 2008.

26 June 2008 - RAPID Climate Change Finale Event

NERC organised a RAPID End of Programme Event at the Royal Society, London on 26 June 2008 with a keynote speech given by Ian Pearson, Minister of State, DIUS. The event informed representatives from Government, regulators, industry, conservation bodies and the wider public about the achievements and future direction of the programme.

IV. FINANCE AND OPERATIONS

- a) The statutory accounts for 2007/08 have now been audited and agreed by Audit Committee. They confirm NERC ended the year with a variance of 0.1% of budget (under-spent). KPMG paid compliment to how the NERC finance team have managed to balance the extreme pressures of SSC with continuing to deliver a quality "day job".
- b) The CE has been able to sign off an unqualified Statement of Internal Control for 2007/08, supported by maximum assurance levels from Internal Audit.
- c) Initial detailed forecasts for 2008/09 show an over-commitment on resource of some £5m, including £2m for foreign exchange exposure (see later). On top of this cost pressures exist around ships at BAS and NMFD. Central finance is working with the business units, and exploring other opportunities to control this back to allocation.
- d) NERC and Southampton University have now agreed an approach to long term maintenance for NOC. This secures the future of a key NERC asset at reduced cost to NERC, in comparison to previous practice.
- e) Planning permission has been gained for the build at Wallingford, removing a key sub risk from the project.

Other risk movements

- f) *[management in confidence]*

- g) *[management in confidence]*
- h) A new risk has been added recognising the overall effect of Energy / Fuel costs (ships, aircraft, buildings), above current allowances in the delivery plan.
- i) We have resolved the outstanding EYF issue (£5m) with DIUS. Insurance issues around the BAe146 have been resolved, as have former issues with SAMS sustainability and DIUS communications.

V. HEALTH AND SAFETY

- a) *New Health and Safety Advisor appointed*
A new NERC Health and Safety Advisor has been appointed to take over from Dr Stuart Dobson OBE, who will soon be retiring from NERC. The new appointee is Dr Neville Hime who joins NERC from the Pharmaceutical R&D sector and will take over from Dr Dobson with immediate effect. The role has been expanded to incorporate responsibility for Corporate Security and Risk.

VI. SHARED SERVICE CENTRE

- a) *Project Design and Planning*
At its last meeting Council was informed that a mid-project review was to be held on the 21st May. At this review meeting it was agreed by the RCUK SSC Project Board (PB) that as a result of the delays during the design phase the SSC would not be going live at the beginning of October as planned.
- b) It was agreed that a plan with supporting budgetary implications and other assumptions would be produced for the PB approve. At its meeting on the 13th June, the PB considered an initial plan but decided that bilateral discussions would be held between the Project Team and individuals PB members to build confidence in the plan. The PB decided at its meeting on the 23rd June on a revised implementation plan with the first Councils (EPSRC/ESRC) going live in February 2009. NERC would go live in June allowing a period of stabilisation and 'lessons learned' after the first implementation. This will reduce the roles for NERC and subsequent go lives which are due to be completed by December 2009.
- c) As reported at the last meeting, the NERC view is that the delays, whilst certain to increase project cost, can be used positively to ensure that the business solutions implemented are of the necessary quality.
- d) The NERC SSC team are working to ensure that the solution can be successfully implemented within each of our Research Centres and that appropriately timed training and support is provided to everyone affected by what will be significant process changes.
- e) *Grants*
Following a review of the options, at its meeting on the 13th June 2008 the RCUK SSC Project Board agreed to open negotiations directly with Oracle for the implementation of the Grants Processing System to be operated by the SSC. Originally it was envisaged that the Systems Integrator, Fujitsu, would deliver the grants solution using Oracle products. It is hoped to agree a contract and price with Oracle in the next two months.
- f) *Budget*

As Council has been advised, NERC is responsible for 20% of the cost of the project. The overall project budget is currently £63 million but it will increase as a result of the current replanning exercise. The increase in costs is being calculated but is likely to be around 10%.

- g) Due to its scale and complexity, the project remains high risk. NERC continues to play a proactive role and is investing increasing levels of staff resource into it as we move closer to migration. A further update on the progress of the project will be provided verbally at the Council meeting.

VII. HALLEY VI

- a) A written update on Halley VI from Mr Robert Culshaw, BAS, is provided at Annex C.

VIII. NERC RESEARCH CENTRES

British Antarctic Survey (BAS)

- a) *Characterizing Ice Sheets during the Pliocene*

In a paper published by scientists at BAS, and from the universities of Leeds and Bristol, new modelling of the East Antarctic Ice Sheet during the Pliocene - the last epoch of geological time in which global temperatures were generally higher than modern - suggests that the ice sheet was significantly smaller than today. Modelling of the average peak mid-Pliocene warmth suggests that climate variations were not sufficient to trigger major deglaciation of East Antarctica during this period, which has been argued to create open water conditions in the area of the Wilkes Land basin, one possible source of diatoms for Sirius Group sediments. Conversely, even the largest reconstructed extents of the East Antarctica Ice Sheet are smaller than modern; suggesting that the inferences made from Dry Valleys landscapes of a stable, unchanging East Antarctic Ice Sheet cannot be extended to the entire continent. Studies of the behaviour of the East Antarctic Ice Sheet under the warmer conditions of the Pliocene are essential to aid understanding of the future behaviour of the ice sheets in a warmer world.

- b) *HRH The Prince of Wales' Visit*

On 27 May 2008 scientists, business leaders and politicians met HRH The Prince of Wales at BAS in Cambridge to discuss the urgent need to develop new and longer-term policies for tackling climate change. The event was organised jointly by BAS and the University of Cambridge Programme for Industry (Prince of Wales's Corporate Leaders Group on Climate Change).

Guest speakers included the Rt Hon John Hutton MP, Secretary of State for Business, Enterprise and Regulatory Reform, and Reijo Kemppinen, Head of the European Commission Representation in the UK, and leading scientists from BAS. Around 30 business leaders of major UK and international companies participated.

- c) *New Vision of Climate Change through Google Earth*

Google Earth users were able to see how climate change could affect the planet over the next century, along with viewing the loss of Antarctic ice shelves over the last 50 years, thanks to a new project launched on 19 May 2008. The project, Climate Change in Our World, was the product of a collaboration between Google, the UK Government, the Hadley Centre and BAS to provide two new 'layers', or animations available to all users of Google Earth. Prime Minister Gordon Brown launched it at the Google Zeitgeist conference.

One layer used science from the Hadley Centre to show world temperatures throughout the next hundred years under medium projections of greenhouse gas emissions, along with stories of how

people were already being affected by changing weather patterns. The second layer, developed by BAS, showed the retreat of Antarctic ice shelves since the 1950s, and featured facts about climate change science and impacts in the Antarctic.

British Geological Survey (BGS)

- a) *Preserving the unpreservable: a lost world rediscovered at Christian Malford, UK.*
The small village of Christian Malford, Wiltshire (UK) is known to palaeontologists the world over because of the chance discovery of an astonishing fossil bonanza in the mid-nineteenth century. Pits in the Jurassic Oxford Clay yielded thousands of specimens of exquisitely preserved ammonites, fish and crustaceans, but became most famous for squid-like cephalopods and belemnites (collectively termed coleoids) with fossilized soft-parts.
The precise location of the find has remained obscure, until now. BGS drilled out the location and cut a trench to expose these fossils in 2007. A new attempt is underway to understand the animals and their ancient environment that are both uniquely preserved.
- b) *Taking NERC environmental science into Africa.*
BGS has over the years worked all over Africa and much of the geological framework of English speaking Africa was defined by the overseas division of the BGS. BGS is currently rebuilding activities in East Africa and more specifically in countries bordering the African Rift valley with the World Bank and also DfID. There are outstanding opportunities for NERC science in these regions of Africa and a strong BGS presence could help as a springboard for NERC science and capacity building in general in Africa.
- c) *The geological framework for underground waste management.*
BGS has been very active over the past weeks in exchanges with BERR and with Defra on the role of the BGS in CCS and in radioactive waste disposal in underground reservoirs. A significant refocusing of BGS geological mapping activities is in hand to ensure that BGS has the full capability to respond, on behalf of government and in partnership with other stakeholders, to this important issue.

Centre for Ecology and Hydrology (CEH)

- a) *CEH launches new Science Strategy*
CEH successfully launched its new five year Science Strategy at the Royal Society on April 30. Nearly 100 stakeholders heard CEH Director Professor Pat Nuttall explain that the strategy aims to address some of Planet Earth's most fundamental environmental challenges. NERC CE Professor Alan Thorpe chaired the evening and the guest speaker at the launch was the Chief Scientific Adviser to HM Government, John Beddington. Professor Beddington said, "There is a great need for integrated research to solve the complex environmental challenges facing humankind. CEH has recognised this in its new Science Strategy, which has collaboration and cross-cutting scientific disciplines at its heart."
- b) *UK Biological Records Centre to move*
CEH manages the UK Biological Records Centre (BRC) which is jointly funded by the Joint Nature Conservation Committee and NERC. The fifteen CEH staff within the BRC will be located at CEH's Wallingford site by December 2008. BRC activities continue to attract national attention. Recent highlights include the publication of a new atlas mapping the distribution of the 60 flea species found in Britain and Ireland, and BRC Head, Dr Mark Hill, giving oral evidence at the House of Lords Science and Technology Committee inquiry on systematic biology research and taxonomy.

- c) *New guidelines for the improved description of Genomes and Metagenomes*
The Genomic Standards Consortium, an international initiative led by Dawn Field at CEH and including representatives from a range of major sequencing and bioinformatics centres, recently created a new guideline for describing genomes and metagenomes. The guideline, 'Minimum Information about a Genome Sequence' (MIGS), was published in the May issue of the journal Nature Biotechnology. The current ISI impact factor for Nature Biotechnology is 22.7, placing the journal first among primary research journals in the field of biotechnology.

National Oceanography Centre, Southampton (NOCS)

- a) *Science*
Before ice first began to form in Antarctica around 34 million years ago, the Earth was a very different place – but then greenhouse conditions swiftly gave way to an icehouse climate – causing the oceans to become less acidic. Scientists at NOCS and Germany's GKSS Research Centre have been piecing together how Earth's changing climate affected ocean chemistry during this period of transition. Their work sheds light on the links between glaciation and the ocean carbon cycle. Their research published in [Nature](#) (24th April 2008).
- b) *RRS Discovery*
While on passage to a science cruise NW of Scotland on 23 Mar, RRS Discovery suffered a major defect on the forward DC motor which is part of the ship's main propulsion. The cruise was postponed and the ship was diverted to Birkenhead for investigation and repair using specialist contractor support. Successful harbour trials have taken place and the ship is likely to sail on 19/20 Jun for essential sea trials which must be completed prior to the next science cruise due to start at the end of the month.
- c) *Knowledge Transfer*
The first International Ocean Stewardship Forum bringing together leading marine scientists, policy-makers and legal experts to develop an integrated approach to the protection of the marine environment takes place at the National Oceanography Centre, Southampton 17-18 June. The forum a range of topics of immediate concern, including territorial sovereignty and the exploitation of marine resources, carbon emissions from shipping, the transportation of hazardous materials, carbon sequestration, environmental impact assessment and the implementation of international law instruments such as UN Convention on the Law of the Sea (UNCLOS) and the Oslo and Paris Convention on pollutions of the seas (OSPAR).
- d) *People*
The National Oceanography Centre, Southampton is sad to report the death of Professor Mike Fasham FRS, a retired NERC Individual Merit Promotion (IMP) member of staff who passed away on Saturday 7 June aged 66. Mike undertook seminal research in marine ecosystem modelling.

IX. SELECTION OF CHIEF EXECUTIVE'S ACTIVITIES

- 12th May - Meeting with Dr Stuart Saunders and Sybylla Tindale, University of Cape Town Trust
19th May - Howard Dalton Memorial, Warwick University
21st May - Bilateral with Ian Pearson
21st May - Natural England, State of the Natural Environment, launch event
23rd May - Opened Cranfield Soil and Water Laboratory
2nd June - Foresight Land Use Futures High Level Stakeholder Group meeting, DIUS
9th June - Dinner with DIUS Ministers and Research Council Chief Executives, House of Commons
13th June - Meeting with the Environment Agency
18th June - LWEC Launch Event and evening reception with Foundation for Science and Technology

24th June - Ozone Hole meeting called by John Denham
25th June - Meeting of RCUK Physics Review Panel
26th June - RAPID Finale event

NERC COUNCIL

UNCONFIRMED MINUTES OF THE TWO HUNDRED AND EIGHTY SECOND MEETING OF NERC COUNCIL HELD AT POLARIS HOUSE, SWINDON ON THURSDAY 8TH MAY 2008.

Issue

- 1: To confirm that the unconfirmed minutes of the 282nd meeting of NERC Council are a true and accurate record of the meeting.

Discussion led by

- 2: Chairman

Annexes attached

3. Annex A – Addendum to Council minutes regarding Halley VI update

Author of paper

4. Miss Samantha Way, Secretary to NERC Council.

Action

5. Council is invited to **CONFIRM** the minutes of the 282nd meeting.

NERC COUNCIL

**CONFIRMED MINUTES OF THE TWO HUNDRED AND EIGHTY SECOND
MEETING OF NERC COUNCIL, HELD AT POLARIS HOUSE, NORTH STAR
AVENUE, SWINDON ON 8TH MAY 2008**

Members Present:

Mr E Wallis (Chairman), Professor AJ Thorpe (CE and Deputy Chairman), Professor PJ Curran, Professor HC Davies, Professor AH Fitter, Professor LA Glover, Mr P Hazell, Mr E Jenner, Professor M Lockwood, Professor TR Meagher, Professor JFB Mitchell, Mrs K Morgan, Mrs S Parkin, Professor R Watson, Professor BM Wilson.

Apologies: Professor T Davies, Professor AN Halliday

Representative of the Secretary of State: Mr PJ Williams, Department for Innovation, Universities and Skills

NERC Directors: Mr NFD Bloomer (Finance and Operations), Dr P Newton (Acting, Science Delivery) Mrs JE Timberlake (People, Skills and Communication), Dr SHS Wilson (Strategy and Partnerships).

Other Attendees: Professor DJ Wingham (Chair of SISB) all items, Professor AE Hill (Director, NOCS) item 5 only, Dr MG Schultz (Head of Scientific Facilities & Technology) item 7 only.

Secretary: Miss SJ Way

1. Introductory Remarks – Oral item

- 1.1 Chairman welcomed members to the 282nd meeting of NERC Council and noted apologies.
- 1.2 Chairman thanked Professor Glover for her presentation to Council and asked for a copy of the presentation to be circulated to members.
- 1.3 Chairman informed Council that the re-organisation of Swindon Office Directors' roles and responsibilities has been quickly and effectively implemented. Chairman introduced Dr Newton who is Acting Director, Science Delivery whilst recruitment for the permanent post is carried out.
- 1.4 Members were asked to declare any relevant vested interests that were not explicit in the papers. Mrs Morgan reminded Council of her role as a member of the Board of Trustees, PML.

2. Financial Forecast and Context – (NERC 08/14 (P))

- 2.1 Mr Bloomer advised that the financial context item will now be included as a standing item on the agenda in response to the increased need for such general information within the FAB framework and to guide Council on the impact of specific decision later in the agenda.

- 2.2 Mr Bloomer reminded Council of the definitions of: near cash; non cash; and capital, as well as outlining the terminology used to describe whether or not funds are available to spend ('committed', 'allocated' and 'open' funds). He advised Council that when considering available funds, flexibility within 'allocated' funding should be taken into account as well as the use of 'open' funds. Council noted that the financial context item focussed on near cash and capital only. Mr Bloomer informed Council that CSR07 provided sufficient funds to cover the non-cash element.
- 2.3 Council noted NERC's financial position regarding committed and allocated funds. Mr Bloomer identified 'open' funds available in coming financial years, and the potential demands on these funds. Key risks to the current financial position are the Foreign exchange exposure and Shared Service Centre (SSC) cost overruns / reduced benefit expectations.
- 2.4 Council thanked Mr Bloomer for his paper, who agreed to develop the presentation (in consultation with the SISB chairman) taking into account Council's comments.

3. Living With Environmental Change (LWEC) Update (NERC 08/15)

- 3.1 Dr Newton updated Council on progress with the Living with Environmental Change (LWEC) Programme and asked Council to discuss ways in which synergies in delivering LWEC and the new NERC Strategy can be realised.
- 3.2 Council noted that the LWEC partnership involves sixteen Partners including Research Councils and government-related organisations who have been working to agree desired characteristics, key strategic objectives and a set of processes for the programme.
- 3.3 Council noted the LWEC management structure and that the Partners' Board has agreed to appoint a Director of the programme, a process that is currently underway.
- 3.4 Council noted that the Programme's strategic objectives, agreed by the Partners' Board, had been developed by all Partners and are multi-disciplinary and cross cutting. Council stressed that there must be integration across the objectives.
- 3.5 Council discussed the investment model, noting that ca. 90% of activity and funding should be met by Partners re-aligning existing and planned activities relevant to LWEC, coupled with a ca.10% investment in new activities.
- 3.6 Dr Newton reiterated the strong parallels between the strategic goals of LWEC and 'Next Generation Science for Planet Earth'. Council voiced concern that the delivery of NERC science may be hindered if individual Partners' strategies present conflicting demands on LWEC. Dr Newton assured Council that all Partners have been involved in developing the LWEC strategic objectives with a guiding principle of mutual benefit to those involved, and that participation in all activities is not mandatory.
- 3.7 Council emphasised that the proposed accreditation scheme intended to corral and align/realign existing activities towards delivering LWEC objectives needs to be developed in a way that provides strong incentives for participation. Professor Thorpe responded that the accreditation scheme has yet to be developed in detail, but that delivering an incentivised scheme will be a prime responsibility of the LWEC Director.

- 3.8 Council questioned how funds will be provided across the partnership to deliver new activities. Dr Newton noted that the partners have agreed that funding mechanisms must be flexible, and that a range of different models will be required; early experiences (e.g. with the ESPA programme in planning) have been positive.
- 3.9 Council raised the need for early engagement with both the general public and international scientists. Dr Newton confirmed that the intention is to develop international involvement beyond that already envisaged in ESPA now that the initial partnership is fully established, and proposed that a paper on public engagement be considered at the next LWEC Partners' Board.
- 3.10 Council felt that business and industry sectors should also be consulted and it was suggested that a 'kite mark' scheme might be set up for businesses to invest in LWEC. Dr Newton agreed to take this suggestion forward.
- 3.11 Council noted progress of the LWEC partnership and Chairman thanked Council for an excellent debate on how LWEC and the NERC Strategy can complement one another.

4. Roadmap on Polar Science for NERC (NERC 08/16 (P))

4.1 *[Management in Confidence]*

4.2 *[Management in Confidence]*

4.3 *[Management in Confidence]*

4.4 *[Management in Confidence]*

5. Replacement of the RRS Discovery (NERC 08/17 (P))

- 5.1 Chairman welcomed Professor Ed Hill to the meeting and explained that Professor Hill would stay for the discussion regarding replacement of the RRS Discovery despite his vested interest as he had not written the paper or been directly involved in producing the options presented to Council.
- 5.2 Professor Hill talked Council through the roles of a research ship, and described a number of the areas of science enabled by NERC's existing research vessels; (RRS James Cook, RRS Discovery and RRS James Clark-Ross). Professor Hill illustrated a number of future trends and stressed the importance of research vessels in ensuring that the UK is a leading international player in the area of marine sciences.
- 5.3 Mr Bloomer introduced the RRS Discovery Replacement paper, including design / cost options available for Council consideration and approval. He also provided an update on progress made by the project and reminded Council of the current problems with the existing RRS Discovery, advising that the replacement project needs to move forward swiftly due to the lengthening delivery lead times resulting from the busy commercial market. However, the quality of project management would not be compromised and the external Gateway review process provides the necessary levels of quality assurance.
- 5.5 Mr Bloomer confirmed that there had been very little 'scope creep' from the specification for the current RRS Discovery, other than the inevitable improvements brought about by modern technology and new regulations. The only additions to the basic design were adjustments for greening purposes at a cost of £2m, the inclusion of dynamic positioning at

a cost of £2m – which had delivered such excellent operational advantages to date on the James Cook. Council were reassured that the design and technology for the replacement ship is not completely new or unknown in terms of reliability.

- 5.6 Mr Bloomer confirmed that the amount earmarked from the Large Facilities Capital Fund (administered by the Department of Innovation, Universities and Skills) was £38.5m and it must be assumed that this figure would not increase. However, NERC does have some flexibility in the Capital budget to accommodate increased costs if necessary.
- 5.7 Following consideration of the options available to them, Council supported the Project Board's preferred option and assigned a funding envelope of £64m plus £6m contingency (covering escalation, design risk, and Foreign Exchange fluctuations). Council delegated authority to commit funds from within the assigned funding envelope to the Chief Executive.

6. FAB Update (NERC 08/18)

6.1 *[Management in Confidence]*

6.2 *[Management in Confidence]*

6.3 *[Management in Confidence]*

6.4 *[Management in Confidence]*

6.5 *[Management in Confidence]*

6.6 *[Management in Confidence]*

6.7 *[Management in Confidence]*

7. High Performance Computing – Collaboration with the Met Office (NERC 08/19 (P))

7.1 *[Management in Confidence]*

7.2 *[Management in Confidence]*

7.3 *[Management in Confidence]*

7.4 *[Management in Confidence]*

7.5 *[Management in Confidence]*

8. CEH Transition Update

Update on progress of CEH Transition and Integration project (NERC 08/20)

- 8.1 Mr Bloomer reported that CEH had met the Transition and Integration project budget for the last financial year and had exceeded the CR target. Mr Bloomer advised Council that a member of key staff had left since the last report but recognised that over a period of two years (including a major RAE related recruitment process for HEIs) there would in any case be a certain level of turnover amongst key staff.

- 8.2 Council agreed that the progress update on CEH T&I project was no longer required as a standing item on the Council agenda. Any significant news will now be reported to Council through the Executive Report.
- 8.3 Professor Thorpe was asked to communicate Council's congratulations to Professor Nuttall, and those working on the Transition and Integration programme, for the successful management of the project.

CEH Wallingford BREEAM excellent proposal (NERC 08/21)

- 8.4 Mr Bloomer reminded Council that NERC's environmental policy requires new constructions to achieve a BREEAM 'excellent' rating. The environmental strategy estimated that this would add was around 15% to build costs but the additional cost of uplifting the rating for the Wallingford build from 'very good' to 'excellent' will be approximately £1.2m, an increase of 9% on the base scheme cost of £13.5m.
- 8.5 Council recognised the importance of the new building and facilities being attractive to members of staff who are considering relocation to CEH Wallingford. It was reiterated that BREEAM is mainly about sustainability rather than greening. Additional relatively inexpensive greening measures will be funded from the NERC Greening fund.
- 8.6 Council approved the approach to BREEAM rating uplift.

9. Council Audit Committee

Confirmed minutes of the 39th meeting of Council Audit Committee (Jan 2008) (NERC 08/22 (P))

- 9.1 Council noted the confirmed minutes of the 39th meeting of Council Audit Committee.

Draft minutes of the 40th meeting of Council Audit Committee (April 2008) (NERC 08/23 (P))

- 9.2 Council noted the draft minutes of the 40th meeting of the Council Audit Committee.

Update on Council Self Assessment Exercise – Oral

- 9.3 Mr Hazell reminded Council that the questionnaires for the Council Self Assessment exercise have now been circulated and responses are required by 23rd May 2008. Council were informed that a summary of the responses will be submitted for the September Council meeting.
- 9.4 Council noted that recruitment is currently underway for an independent member of the Audit Committee. 15 applications have been received and Mr Hazell, Mrs Parkin and Mrs Timberlake will be on the interview panel.
- 9.5 Mr Hazell confirmed that the work on Capital Projects will be ready to present to Council in July 2008.

10. Science and Innovation Strategy Board Report

Report of the 33rd Science and Innovation Strategy Board meeting (Feb 2008) (NERC 08/24 (P))

- 10.1 Professor Wingham advised Council that the main business items discussed were progress on the setting up of the National Capability Advisory Group (NCAG), the SISB Terms of Reference, and consideration of the Theme Action Plans (TAPs) which will come to

Council in July. He confirmed that the TAPs had been considered individually, and then commonalities between the seven Themes identified. Theme Leaders were in attendance for the duration of the discussions to ensure full engagement across all Themes. Gaps had been identified and a plan on how science will be prioritised at the May SISB meeting was discussed.

- 10.2 Council noted the unconfirmed minutes of the 33rd SISB meeting and the draft agenda for the 34th SISB meeting.

Review of the Science and Innovation Strategy Board Terms of Reference (NERC 08/25)

- 10.3 Professor Wingham pointed out that the SISB Terms of Reference had not been reviewed for some time and that the Audit Committee had commented on how difficult it was to monitor whether SISB are meeting their objectives using the current Terms of Reference. Council were asked to approve the revised Terms of Reference which takes account of the issues raised by the Audit Committee review of SISB.

- 10.4 Council approved the revised SISB Terms of Reference, subject to consideration of amendments suggested to Professor Wingham by Mrs Parkin.

SISB Membership

- 10.5 Chairman informed Council that as well as Professor Huw Davies - the Council representative on SISB- there is an opportunity for Council members to attend SISB (one per meeting) as an observer on a meeting by meeting basis. Members wishing to take up this opportunity should contact Professor Wingham.

11. Executive Report (NERC 08/26)

Halley VI Update

11.1 *[Management in Confidence]*

11.2 *[Management in Confidence]*

11.3 *[Management in Confidence]*

11.4 *[Management in Confidence]*

11.5 *[Management in Confidence]*

Update on Global Monitoring for Environment and Security (GMES)

11.6 *[Management in Confidence]*

Update on Shared Services Centre (SSC)

11.7 *[Management in Confidence]*

12. Rolling Programme of Business (NERC 08/27)

- 12.1 Chairman gave his apologies for the presentation and dinner in Edinburgh on 2nd July 2008 prior to the main Council meeting which he will attend on 3rd July.

- 12.2 Council noted that there will not be a retreat in September 2008 and that a retreat will be held in February 2009, to include dinner on 10th February, followed by two full days of business on 11th and 12th February.

13. Unconfirmed minutes of the 281st Council meeting held on 7th February 2008 (NERC 08/28 (P))

13.1 Council confirmed the minutes of the 281st Council meeting as a true and accurate record.

14. Decisions and Actions, and matters arising from the minutes of the 281st Council meeting. (NERC 08/29)

14.1 Council noted the decisions and actions of the 281st meeting. There were no matters arising.

15. Any other business

15.1 Professor Thorpe reported that BAS have recently achieved IiP re-accreditation for the next 3 years.

NERC COUNCIL

DECISIONS, ACTIONS AND MATTERS ARISING FROM THE MINUTES OF THE 282nd NERC COUNCIL MEETING HELD ON 08 MAY 2008

Issue

1. The meeting of NERC Council on 08 May 2008 resulted in a number of decisions and actions. This paper reports on progress made on the decisions and actions recorded in the minutes that are not addressed elsewhere on the agenda.
2. To provide Council with an opportunity to discuss any matters arising from the meeting.

Discussion led by

3. Chairman

Author of paper

4. Miss Samantha Way, Secretary to NERC Council, sway@nerc.ac.uk, 01793 442570

Action

5. Council is invited to:
 - **NOTE** the progress of the decisions and actions from the meeting and any matters arising.
 - **DISCUSS** any matters arising from the meeting.

NERC COUNCIL

CONFIRMED DECISIONS, ACTIONS ARISING FROM THE MEETING OF NERC COUNCIL HELD ON 08 MAY 2008

Items highlighted in grey should be treated as 'Management in Confidence'.

Item No.	Minute Ref	Decision/Action	Person responsible for communicating decision:	Person responsible for Action	D or A	Progress update
1	1.2	CHAIRMAN'S INTRODUCTION Circulate the slides from Professor Glover's presentation		Council Secretary	A	Complete.
2	2.4	FINANCIAL FORECAST AND CONTEXT (NERC 08/14 (P)) Develop the Financial Context item taking into account Councils' comments regarding the presentation of information		Director, Finance and Operations	A	Complete.
3	3.10	LWEC UPDATE (NERC 08/15) Take forward Council's suggestions on how mutual benefit between LWEC and NERC Strategy can be achieved.		Acting Director, Science Delivery	A	Ongoing.
	3.9	Consider how business and industry sectors might be engaged in LWEC.		Acting Director, Science Delivery	A	Ongoing.

		Engage LWEC Partners' Board on need for public engagement		Acting Director, Science Delivery		Public Engagement on Partners' Board meeting agenda, 20 June 2008.
4		ROADMAP ON POLAR SCIENCE FOR NERC (NERC 08/16 (P)) <i>[Management in Confidence]</i>				
5	5.7	REPLACEMENT OF THE RRS DISCOVERY (08/17 (P)) Council decided on Option 4 for the replacement of the RRS Discovery, and assigned a funding envelope of £64m plus £6m contingency for inflation and Foreign Exchange fluctuations. Council delegated to the Chief Executive authority to commit funds from within the assigned funding envelope.	Director, Finance and Operations		D	Decision communicated.
				Chief Executive	D	Decision communicated.
6		FAB UPDATE (NERC 08/18) <i>[Management in Confidence]</i>				
7		HIGH PERFORMANCE COMPUTING – COLLABORATION WITH MET OFFICE (NERC 08/19 (P)) <i>[Management in Confidence]</i>				

8 (i)	8.2	UPDATE ON PROGRESS OF CEH T&I PROJECT (NERC 08/20) A progress update on CEH T&I project is no longer required as a standing item on the Council agenda.	Director, Finance and Operations		D	Decision communicated.
	8.3	Chief Executive will communicate Council's congratulations to Professor Nuttall, and those working on the Transition and Integration programme, for the successful management of the project.		Chief Executive	A	Complete.
8 (ii)	8.6	CEH WALLINGFORD BREEAM EXCELLENT PROPOSAL (NERC 08/21) Council approved the approach to BREEAM rating uplift from 'Very good' to 'Excellent' at an additional cost of £1.2m, a 9 percent increase on the cost of the base scheme (£13.5m).	Director, Finance and Operations		D	Decision communicated.
10 (ii)	10.4	REVIEW OF THE SCIENCE AND INNOVATION STRATEGY BOARD (SISB) TERMS OF REFERENCE (08/25) Council approved the revised SISB Terms of Reference.	Council Secretary		D	Decision communicated.
	10.5	Council members to advise Professor Wingham of SISB meetings that they wish to attend.		Professor Wingham	A	Ongoing. Process agreed.
11		EXECUTIVE REPORT (NERC 08/26) <i>[Management in Confidence]</i>				

NERC COUNCIL

ROLLING PROGRAMME OF MEETINGS AND BUSINESS

Background

1. This paper sets out the proposed business for the meeting of Council on 24th September 2008, at MRC, London. The rolling programme of business for the remainder of 2008 is attached at Annex A. The SISB Business Whiteboard is also attached at Annex B for information, particularly for Council members who would like to attend a SISB meeting.

Issue

2. Council is asked to discuss possible items of business for the meeting of Council on 24th September 2008, and consider whether any further items of business should be added to the Council Business Whiteboard.

Annexes attached

3. Annex A, Council Business Whiteboard
Annex B, SISB Business Whiteboard

Discussion led by

4. Chairman

Author of paper

5. Samantha Way, Secretary to NERC Council, sway@nerc.ac.uk, 01793 442570

Action

6. Council is asked to:
 - i) **DISCUSS** any additional items of business for the Council meeting on 24th September July 2008,
 - ii) **DECIDE** whether any further items of business should be added to the NERC Boards White Board.

NERC COUNCIL

ROLLING PROGRAMME OF MEETINGS AND BUSINESS

Background

1. This paper sets out the proposed business for the meeting of Council on 24th September 2008, at MRC, London. The rolling programme of Council business for the remainder of 2008 is attached at Annex A. The SISB Business Whiteboard is also attached for information, particularly for Council members who would like to attend a SISB meeting.

Issue

2. Council is asked to discuss possible items of business for the meeting of Council on 24th September 2008, and consider whether any further items of business should be added to the Council Business Whiteboard.

Persons responsible for implementing outcome

3. Samantha Way, Secretary to Council

Discussion

4. Provisional agenda items for 24th September 2008 meeting, in addition to standing items:
 - Review of Peer Review College
 - GMES update
 - Report on Council Self Assessment Exercise
 - Review of Environmental Management
 - FAB update – approval will be sought for Research Programme funding allocations to centres during transition 2009-14.
 - Responsive mode action plan
 - Annual Report on Health and Safety and Security in NERC

Communication plan:

5. The outcome of this paper will be communicated to the NERC Business Coordination team and appropriate NERC staff.

Action

6. Council is asked to:
 - i) **DISCUSS** any additional items of business for the Council meeting on 24th September 2008,
 - ii) **DECIDE** whether any further items of business should be added to the NERC Boards Whiteboard.

COUNCIL Agenda Overview 2008

NERC 08/43 Annex A

No.	Task	Main Statement	6/7 Feb	7/8 May	2/3 July	23-25 Sept	26/27 Nov
1	Advise on new scientific opportunities, scientific direction and user needs	MS	As Required				
2	Establish the Mission and Strategic Plan and approve the Delivery Plan	MS	As required				
3	Ensure that action is taken to inform Sec of State, DCSI and OSI of any changes impacting on the delivery of No. 2	MS	As necessary				
4	Satisfy itself of the proper use of public funds and that NERC operates within its limits of delegated authority	MS	As required				
5	Receive and review regular financial information concerning the performance of NERC	MS	√	√	√	√	√
6	Ensure Council's views are reflected in pursuit of RCUK objectives and to be informed of the views of RCUKEG and JSG	MS	As necessary				
7	Maintain high standards of corporate governance, including making use of the audit committee	MS	As necessary				
8	Approve minutes from previous meeting and receive update on progress of matters arising		√	√	√	√	√
9	Receive report from Chief Executive on agreed areas		√	√	√	√	√
10	Receive rolling programme of Council business		√	√	√	√	√
11	Receive report from Chairs of SISB and Audit Committee on previous meeting(s)		√	√	√	√	√
12	Consider open Council meeting issues		√				
13	Annual Report from Audit Committee on its activities		√				
14	Receive Annual Report on Health and Safety and Security in NERC					√	
15	Consider Annual Forward Look of agenda and business for following year						√
16	Review NERC Ethics Policy						√
17	Consider NCEO programme proposals		√				
18	Receive report on review of SISB from Audit Committee						
19	Review SISB's ToRs			√			
20	Update of FAB		√	√	√	√	√
21	CEH Transition Report Update		√	√			
22	Final report on Council Sub-Group on Research Centre Mission and Sustainability		√				
23	International strategy						√
24	Strategic Management Tool				√	√	√
25	Theme Action Plans				√		
26	National Capability Action Plan						√?
27	Responsive Mode Action Plan					√	
28	Knowledge Exchange Plan						√
29	Peer Review College Review report					√	
30	CEH Wallingford BREEAM excellent proposal			√			
31	RRS Discovery			√			
32	Science in Society Overview						√
33	LWEC Progress Update			√			
34	GMES Update					√	
35	Audit Committee Report on Programme Management			√			
36	High Performance Computing -Collaboration with Met Office			√			
37	Report on Council Self -Assessment Exercise					√	
38	Evaluation Programme 2008/09			√			
39	Spending Review 2009				√	√?	√?
40	Dynamic Strategy: Annual Review of Strategy						√
41	Review of Environmental Management					√	
42	Update on Business Cycle				√		
43	Annual Delivery Plan				√		
44	RCC Mission Statements						√
45	Science Information Strategy						√?
46	FAB Update - RP funding allocations for Centres during transition (2009-14)					√	

No.	Task	26/27/28 Feb	13/14/ 15 May	14/15 Jul	7/8 Oct	2/3 Dec
1	Approve minutes from previous meeting and receive update on progress of matters arising	√	√	√	√	√
2	Chairman's report	√	√	√	√	√
3	Finance report	√	√	√	√	√
4	SISB Forward Agenda	√	√	√	√	√
5	Council agenda	√	√	√	√	√
6	Living With Environmental Change		√			
7	CEH Science Plan	√				
8	Review of SISB's ToR	√				
9	International Strategy				√	
10	Science Information Strategy				√	
11	Hermes integrated programme pre dinner presentation	√				
12	Peer Review College review and affiliate college membership			√		
13	Self evaluation of SISB				√?	
14	Theme Leader Action Plans	√	√			
15	Global Monitoring for Environment and Security			√		
16	National Capability Advisory Group Action Plan				√	√
17	Responsive Mode Action Plan			√		
18	Delivering NERC strategy - managing performance			√	√	√
19	ERFF skills needs review	√			√	
20	New business cycles including cross-Council research programmes			√		
21	UK Energy Research Centre		√			
22	UK Collaborative on Development Sciences pre-dinner presentation			√	√?	
23	Joint Climate Research Programme			√		
24	Evaluation Programme for 2008-09		√			
25	Strategic Ocean Funding Initiative				√	
26	Theme Action Plan update post-Council				√	

NERC COUNCIL

BUSINESS CYCLES

Background

1. As part of its discussion at the 28/29 November 2007 meeting on the evolving Strategic Management Tool (SMT) (paper 07/77 on the secure Council members website refers), Council noted the planned development and review cycles for the SMT and Action Plans (APs) into 2008 and beyond. Considerable progress has been made on implementing the SMT and the APs but work still remains to be done before the “steady state” of the business cycle is in place.
2. In its discussions around Halley VI at the February 2008 meeting, Council also asked for consideration of how it could be provided with a better overall view of the business consequences of the options with which Council is presented on major issues.

Issue

3. This paper provides an update on the progress in establishing NERC’s business cycle, the planned timelines for delivery of those outstanding elements and sight of the steady state business cycle once in place. It also sets out how new information that Council is now receiving could provide the better overall view of business consequences that it seeks.

Annexes attached

4. Annex A – Refreshed Development and Transitional Phase for SMT and Action Plans
Annex B – Steady State Review Cycle for SMT and Action Plans

Discussion led by

5. Dr Steven Wilson, Director, Strategy and Partnerships

Vested Interests

6. N/A

Action

7. Council is asked to
 - i) **NOTE** the latest planning for the development, transitional and steady state business cycle for the SMT and APs
 - ii) **NOTE** that the Council retreat will now take place over two days at the February meeting each year, starting in February 2009
 - iii) **NOTE** the Office’s view about the range of information that it will regularly receive in order for it to take an overall view of NERC business consequences

NERC COUNCIL

BUSINESS CYCLES

Background

1. As part of its discussion at the 28/29 November 2007 meeting on the evolving Strategic Management Tool (SMT) (paper 07/77 on the secure Council members website refers), Council noted the planned development and review cycles for the SMT and Action Plans (APs)¹ into 2008 and beyond. Considerable progress has been made on implementing the SMT and the APs but work still remains to be done before the “steady state” of the business cycle is in place.
2. In its discussions around Halley VI at the February 2008 meeting, Council also asked for consideration of how it could be provided with a better overall view of the business consequences of the options with which Council is presented on major issues.

Issue

3. This paper provides an update on the progress in establishing NERC’s business cycle, the planned timelines for delivery of those outstanding elements and sight of the steady state business cycle once in place. It also sets out how new information that Council is now receiving could provide the better overall view of business consequences that it seeks.

Person responsible for implementing outcome

4. Dr Steven Wilson, Director, Strategy and Partnerships

Estimated action delivery/completion date

5. Development phase upon completion of the National Capability Action Plan in November 2009
Transitional phase review in July and November 2009
Steady state annual business cycle review period (Autumn – February) effective from Autumn 2010

Discussion

6. In the last few years, NERC has produced its new strategy “Next Generation Science for Planet Earth” which sets out NERC’s long term goals and key priorities, new delivery processes (FAB) and the Strategic Management Tool to provide an overview of how the strategy will be delivered and its performance managed. In delivering the strategy, more detailed Action Plans have been set out to aid in prioritisation of funding and activities to meet key NERC aims.
7. The aim of developing strategy in NERC is to ensure that it is sufficiently dynamic to take account of the changing landscape in which NERC operates (eg new scientific knowledge,

¹ The term “Action Plans (APs)” is used to collectively describe Theme Action Plans, Responsive Mode Action Plan, National Capability Action Plan and other Theme inputs as appropriate.

emerging technologies, policy-making, socio-economic and environmental challenges etc), so there is a need for regular review of the strategy.

8. Such a cycle of development and ongoing review will need effective planning to ensure that those Boards which have key roles to play in the cycle have the opportunity to do so at the right time by working at a strategic level.
9. There are three phases to this cycle of development and ongoing review:
 - i) a development phase, where initial Actions Plans are developed and approved
 - ii) a suitable transitional phase to allow progression to the steady state business cycle in a managed way
 - iii) the steady state business cycle, the ultimate aim of which is to work towards Council being in a position to review all the information it needs in order to make decisions on priorities and funding accordingly
10. The updated position on each of these phases is set out below.

Development phase

11. NERC has introduced major changes to its strategy and the way it will deliver this and manage performance. Some of these have already been or are on the verge of being agreed, some will require a further period of time to develop. A summary of the development phase is set out in paragraphs 12 – 17 below and in red in the diagram in Annex A.

Development phase: Strategic Management Tool

12. Council will note that the Strategic Management Tool has been agreed and that it will receive its first quarterly report at the July 2008 meeting. SISB and NEB will be similarly engaged ahead of each quarterly report to Council to allow for their input into managing performance against relevant strategic objectives.

Development phase: Action Plans

13. Council will be discussing the Theme Action Plans at this July 2008 meeting, following development of these by the Theme Leaders and two separate discussions at SISB.
14. The Responsive Mode Action Plan will be considered by Council in September 2008.
15. Information relating to other strategy themes will be brought to the Boards as appropriate through discrete agenda items. Council will note from Annex A for example that it is currently planned that it will discuss a draft Knowledge Exchange strategy and the ERFF Skills Review at its November 2008 meeting and so further strategic discussions are expected in these areas as they develop.
16. Timings for delivery of the National Capability Action Plan are still tentative at this stage, however current thinking is that it will be delivered to Council at its November 2009 meeting for approval, having been developed by the new National Capability Advisory Group (NCAG) and SISB beforehand.
17. The development phase will thus be completed by November 2009 with the approval of the National Capability Action Plan (NCAP).

Transitional phase

18. In considering the rate at which we pass from the development phase to the steady state business cycle, it is necessary to allow sufficient time for activities set out in Action Plans to have started before they are reviewed – this is the transitional phase. As a few changes have occurred in timing since Council last saw the overall business cycle, a summary of the refreshed transitional phase is set out in paragraphs 20 – 24 below and in blue in the diagram in Annex A.
19. The transitional phase of review will thus start from July 2008, on approval of the Theme Action Plans, up until the point where, in a period between the Autumn and the February Council meeting on a cyclical basis each year, Council will be in a position to get the better overall view of all the information it needs in order to make decisions on priorities and funding accordingly.

Transitional phase: Strategic Management Tool

20. The NERC Strategy and SMT will be annually reviewed by Council at its July meeting each year.

Transitional phase: Action Plans

21. This transitional phase will see the first annual review of the Theme Action Plans carried out by SISB in June 2009 and approved by Council in July 2009.
22. The Responsive Mode Action Plan will be reviewed by SISB in September 2009 and approved by Council in November 2009.
23. As mentioned at paragraph 17 above, Council will also be asked to approve the National Capability Action Plan at the November 2009 meeting, and so progress is already being made towards the steady state business cycle.
24. Other strategy Themes will be reviewed as necessary, potentially through an update provided in the Chief Executive's report at relevant Council meetings.

Steady state business cycle

25. The aim of the steady state business cycle is to ensure that decisions are timely, items are sequenced and linked in the right manner and time is planned and made available for strategic discussions and consideration of opportunities across the remit of the whole of the NERC strategy.
26. It has been identified that the optimum time for review of APs to take place is between the Autumn and the February Council meeting each year as this allows time for any changes to funding arrangements for following years to be implemented from 1 April that year. It is envisaged that the first overall annual review of all APs will have taken place by the February 2011 Council meeting, with other Boards having an advisory role determining their inputs at their meetings prior to this. Annex B offers an illustrative view of this.
27. It is thus also envisaged that this February meeting each year will essentially be the Council retreat session (rather than one taking place in July each year, looking at a dynamic strategy review) and will run over two full days to allow time for Council to both look back at past performance and success in delivering objectives/activities and to look ahead at upcoming issues (eg Spending Reviews) and to plan for these accordingly.

28. Council members may note that there is no explicit reference in the Annexes to the Research and Collaborative Centres' annual Business Plans which are to be developed as a result of a recommendation from the Council Sub-Group on the Mission and Sustainability of NERC Research Centres under FAB.
29. The annual Business Planning process and outputs are currently in development, but it is anticipated that the Chief Executive would approve the Business Plans by January each year, allowing for input to Council, verbally or via the Executive Report, of any issues to be exception reported. The timing of the Action Plan reviews, particularly by NCAG and SISB, do allow for Research and Collaborative Centres to factor in any recommendations these Boards may be making to Council in the development of their Business Plans (recognising though that Council will still have the final decision on the review of the APs) – this is particularly important for sustainability purposes in relation to National Capability and in identifying the overall funding mix that Centres are anticipating going forward.

Overall view of business consequences

30. It is the view of the Office that the APs that Council will approve and review annually – within the same period of time each year from Autumn 2010 onwards - together with the annual dynamic strategy review, the quarterly report against the Strategic Management Tool, its annual backward- and forward-looking retreat session and the suite of financial information that it favourably received for the first time at its May 2008 meeting (paper 08/14 (P) Financial Forecast and Context) will provide the better overall view of NERC business consequences that it seeks.

Estimated resources required

31. Nil – absorbed within Business Co-ordination as part of its core work.

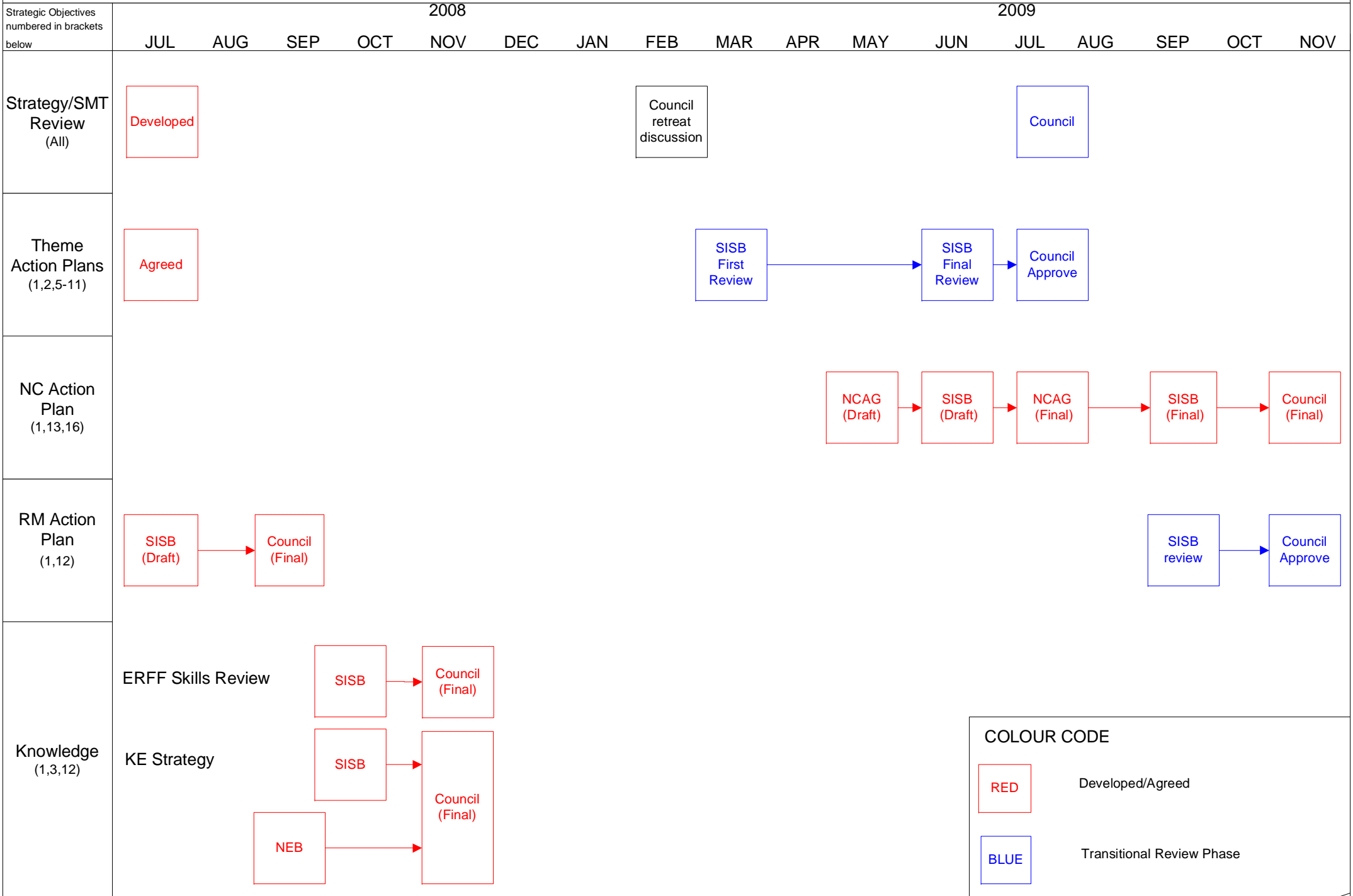
Communication Plan

32. The development and transitional phase and steady state business cycles will be scheduled by the Business Co-ordination group into Board business accordingly.

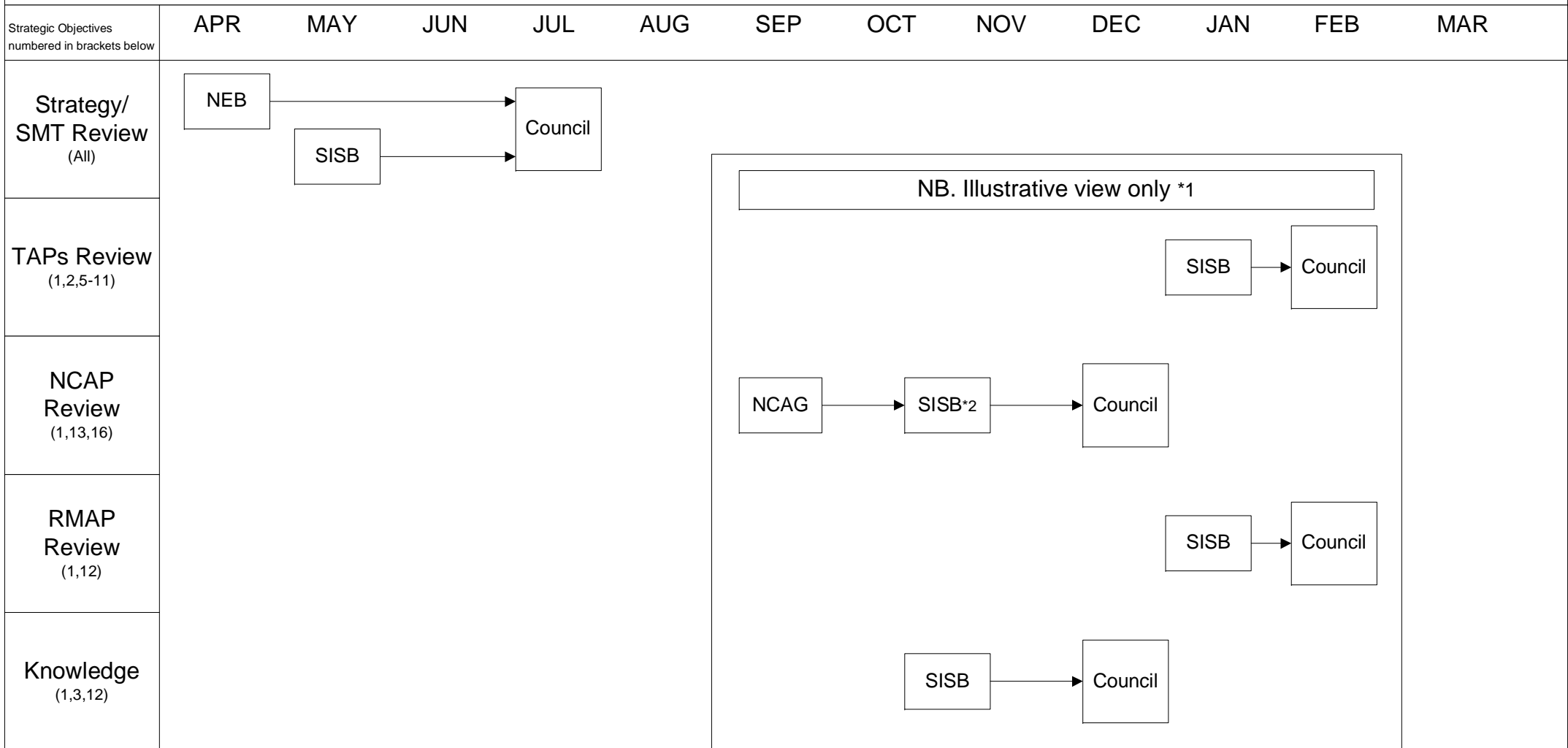
Action

33. Council is asked to
 - i) **NOTE** the latest planning for the development, transitional and steady state business cycle for the SMT and APs
 - ii) **NOTE** that the Council retreat will now take place over two days at the February meeting each year, starting in February 2009
 - iii) **NOTE** the Office's view about the range of information that it will regularly receive in order for it to take an overall view of NERC business consequences

REFRESHED DEVELOPMENT AND TRANSITIONAL PHASE FOR SMT AND ACTION PLANS



STEADY STATE REVIEW CYCLE FOR SMT AND ACTION PLANS



Note

*1 This is an illustrative view only of how the steady state business cycle will operate within its critical period of review and approval by the Boards between the Autumn and the February Council Meeting each year. Reviews can be scheduled anywhere within this timeframe, so it is suggested that this is tightened up with further experience of actually carrying out the reviews

*2 The outputs from NCAG and SISB discussions on the NCAP will feed through into the RCC Annual Business Planning Process at this stage.

COMMON NERC ACRONYMS

AFI	Antarctic Funding Initiative (Directed Programme)	ERFF	Environment Research Funders Forum
AHRC	Arts & Humanities Research Council	ESF	European Science Foundation
APPRAISE	Aerosol Properties, Processes and Influences on the Earth's climate (Directed Programme)	ESFRI	European Strategy Forum on Research Infrastructure
BAS	British Antarctic Survey (NERC)*	ESPA	Ecosystem Services and Poverty Alleviation
BBSRC	Biotechnology and Biological Sciences Research Council	ESRC	Economic and Social Research Council
BGS	British Geological Survey (NERC)*	ESA	European Space Agency
BNSC	British National Space Centre (DTI)	ESSC	Environmental Systems Science Centre**
BPMF	Business Performance Management Framework	EuroHORCs	European Union Research Organisations Heads of Research Councils
BREEAM	Building Research Establishment Environmental Assessment Method.	EYF	End of Year Flexibility
CASE	Co-operative Awards in the Science of the Environment	FAB	Funding Allocation and Budgeting Project
CASIX	Centre of Observation of Air-Sea Interactions and Fluxes**	FAOG	Finance and Operations Group
CGAM	Centre for Global Atmospheric Modelling (part of NCAS)	FP	Framework Programme
CCLRC	Council for the Central Laboratory of the Research Councils†	FREE	Flood Risk from Extreme Events (Directed Programme)
CEH	Centre for Ecology and Hydrology (NERC)*	GMES	Global Monitoring for Environment and Security
CLASSIC	Climate & Land Surface Systems Interaction Centre**	HEFCE	Higher Education Funding Council for England
COMET	Centre for Observation and Modelling of Earthquakes and Tectonics**	HEFCW	Welsh Higher Education Funding Council
COSMAS	Core-Strategic Measurements for Atmospheric Science (Directed Programme)	HEIs	Higher Education Institutions
CPB	Centre for Population Biology**	HPC	High Performance Computing
CPOM	Centre for Polar Observation and Modelling**	IODP	Integrated Ocean Drilling Program
CSA	Chief Scientific Adviser	IMP	Individual Merit Promotion
CSR	Comprehensive Spending Review	IPY	International Polar Year
CTCD	Centre for Terrestrial Carbon Dynamics**	ISG	Information Strategy Group
CWVC	Clouds, Water Vapour and Climate (Directed Programme)	ITAG	Information Technology Advisory Group
D4RP	'Discovery for Replacement' project	ITT	Invitation to Tender
DARC	Data Assimilation Research Centre**	JIF	Joint Infrastructure Fund (OSI/Wellcome Trust)
DCLG	Department of Communities and Local Government	JSG	OSI/RCUK Joint Strategy Group
DEFRA	Department for Environment, Food and Rural Affairs	LOCAR	Lowland Catchment Research (Directed Programme)
DfID	UK Department for International Development	LWEC	Living with Environmental Change
DfT	Department for Transport	MBA	Marine Biological Association
DGSI	Director General Science and Innovation (formerly DGRC)	MRC	Medical Research Council
DIUS	Department of Innovation, Universities and Skills	NC	National Capability
DMAG	Data Management Advisory Group	NCAG	National Capability Advisory Group
DTI	Department of Trade and Industry	NCAS	National Centre for Atmospheric Science**
EA	Environment Agency	NE	Natural England
EC	European Commission	NEB	NERC Executive Board
EFCHED	Environmental Factors in the Chronology of Human Evolution and Dispersal (Directed Programme)	NGO	Non-Governmental Organisation
EHH	Environment and Human Health	NIC	NERC Investment Committee
EO	Earth Observation	NIEeS	National Institute for Environmental eScience**
EPSRC	Engineering and Physical Sciences Research Council	NMF	National Marine Facilities
ERC	European Research Council	NMF-SS	National Marine Facilities – Sea Systems
		NOCS	National Oceanography Centre, Southampton (formerly Southampton Oceanography Centre - SOC)
		OGC	Office of Government Commerce
		OMG	Operations Management Group (RCUK)
		OPMs	Output and Performance Measures

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OSI	Office of Science and Innovation (DTI)	TAP	Theme Action Plan
PCSG	Personnel Corporate Strategy Group	ToR	Terms of Reference
PGP	Post-Genomics and Proteomics (Directed Programme)	TSB	Technology Strategy Board
PML	Plymouth Marine Laboratory**	TSEC	Towards a Sustainable Energy Economy (Directed Programme)
POL	Proudman Oceanographic Laboratory*	UGAMP	Universities Global Atmospheric Modelling Programme
PPARC	Particle Physics and Astronomy Research Council†	UKERC	UK Energy Research Centre
PQQ	Pre-Qualification Questionnaire (Procurement)	UKIODP	UK Integrated Ocean Drilling Program
PSG	Pay Strategy Group	UKRO	UK Research Office (Brussels)
PSWG	Polar Sciences Working Group	UKSB	UK Space Board
PT	Polluted Troposphere (Directed Programme)	UTLS-OZONE	Upper Troposphere and Lower Stratosphere (Directed Programme)
QR	Quality related (in context of HEI funding)	WAG	Welsh Assembly Government
QUEST	Quantifying and Understanding the Earth System (Directed Programme)		
RAE	Research Assessment Exercise		
RAPID	Rapid Climate Change (Directed Programme)		
RCIAS	Research Councils' Internal Audit Service		
RCUK	Research Councils UK		
RELU	Rural Economy and Land Use (Directed Programme)		
RM	Responsive Mode		
ROD	Research Outputs Database		
RP	Research Programme		
RSU	NERC Research Ships Unit		
SAHFOS	Sir Alister Hardy Foundation for Ocean Science		
SAMS	Scottish Association for Marine Sciences**		
SBRI	Small Business Research Initiative		
SEBCC	Science and Engineering Base Co-ordinating Committee		
SEPA	Scottish Environment Protection Agency		
SHEFC	Scottish Higher Education Funding Council		
SISB	NERC Science and Innovation Strategy Board		
SMA	Science and Management Audit		
SMRU	Sea Mammal Research Unit**		
SMT	Strategic Management Tool		
SOFI	Strategic Ocean Funding Initiative		
SOLAS	Surface-Ocean/Lower-Atmosphere Study (Directed Programme)		
SoR	Statement of Requirements		
SPA	Strategic Partnership Agreement		
SSC	Shared Service Centre		
STAR	System for Targets and Risks		
STFC	Science Technology Facilities Council†		

† PPARC and CCLRC merged to form the STFC on 1st April 2007

A full list of NERC Directed Programmes can be found on the NERC website at: www.nerc.ac.uk/research/programmes/

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MEMBERSHIP OF COUNCIL 2007/2008

Mr Edmund Wallis	Chairman
Professor Alan Thorpe	Chief Executive and Deputy Chairman
Professor Paul Curran	Vice-Chancellor University of Bournemouth
Professor Huw Davies	Institute for Atmospheric and Climate Science, ETH Zurich
Professor Trevor Davies	Pro-Vice-Chancellor - Research, University of East Anglia
Professor Alastair Fitter	Department of Biology, University of York
Professor Anne Glover	Chief Scientific Advisor for Scotland, School of Medical Sciences, University of Aberdeen
Professor Alex Halliday	Head Mathematical Physical & Life Science Division, University of Oxford
Mr Peter Hazell	Chairman of the Argent Group. Chairman of the Audit Committee for: BRIT Insurance PLC, Smith & Williamson and UK Coal PLC. Member of the Competition Commission.
Mr Edwin Jenner	Technology and Business Consultant
Professor Michael Lockwood	STFC & University of Southampton
Professor Thomas Meagher	Chair of Plant Biology, University of St Andrews
Professor John Mitchell	Met Office
Mrs Karen Morgan	Vice Chairman, Royal Agricultural College
Mrs Sara Parkin	Forum for the Future
Professor Robert Watson	Chief Scientific Advisor, DEFRA
Professor Marjorie Wilson	School of Earth & Environment, Leeds University
Secretary to Council	
Miss Samantha Way	01793 442570, e-mail sway@nerc.ac.uk

The Mission of the Natural Environment Research Council is:

The Natural Environment Research Council delivers independent research, survey, training and knowledge transfer in the environmental sciences, to advance knowledge of planet earth as a complex, interacting system. Our work covers the full range of atmospheric, earth, biological, terrestrial and aquatic sciences, from the deep oceans to the upper atmosphere, and from the poles to the equator. Our mission is to gather and apply knowledge, create understanding and predict the behaviour of the natural environment and its resources, and communicate all aspects of our work.

In fulfilling its mission, NERC will:

- support high quality research and technology and maintain long-term capability to understand and predict the environment, natural resources and their response to change;
- foster the health and vitality of the UK environmental science skills base through education, training and career development;
- collect, manage and supply environmental data and provide information to meet the needs of users;
- provide objective, independent expert scientific advice and information to underpin national and international policy and sustainable growth;
- provide specialist scientific facilities and services to meet the needs of UK environmental sciences;
- work in partnership with users and other science suppliers and promote effective knowledge transfer;
- encourage public understanding of environmental issues and the role of science;
- ensure openness, accountability and value for money in the delivery of the NERC mission.

NATURAL ENVIRONMENT RESEARCH COUNCIL

COUNCIL POLICY ON VESTED INTERESTS

1. **Introduction:** NERC uses the expertise, knowledge and advice of the international academic and research community, government agencies, industry and elsewhere. Their involvement is an essential contribution to the Council's decision-making processes, many of which lead to the allocation of public funds.
2. **Issue:** NERC needs to set out clearly how it expects its Council and Committee members to behave, in order to reduce the risk of improper conduct of business or allocation of funds. It is therefore also important that Council's procedures are documented and easily understood, to allay public concern. This can be done by following HM Treasury's guidelines for publicly-funded agencies. All members of NERC Committees who have a vested interest should therefore follow the arrangements below. Vested interest is defined as:
 - the committee member being associated with an institution, department or individual that has submitted a funding proposal or that would otherwise benefit from a decision;
 - being involved, in any way, in the development, or implementation of proposals seeking Council funds or in the evaluation of research investments, or otherwise standing to benefit from a decision.
3. **General Expectation:** If it is not obvious or immediately apparent, Committee members must inform the NERC official acting as Secretary to the Committee, or the Chairperson, of the exact nature of their vested interest. This applies in all instances where a decision could result in the allocation of NERC funds or other resources, or otherwise provide benefit.
4. **Standards:** It is Council policy that:
 - On taking up their appointments, all Council members must declare any private, professional or commercial interests that could conflict with NERC's interests. These interests may be direct or indirect, monetary or non-monetary, which the public might reasonably think could influence the Council members' judgment.
 - NERC will register the declarations of interest centrally and update them every year. Members should, however, provide updated information as changes occur. NERC will put the register on its website so the public can inspect it, and the website detail will be published in the NERC Council's annual report.
 - The chairperson of a meeting will be briefed on interests using the register, and will draw attention to any possible conflicts of interests before the meeting starts.
 - Normally, members with vested interests should leave the meeting while the proposal or issue is being discussed or considered.
 - If the Committee agrees, the Chairperson may use their discretion to allow members with vested interests to remain in the meeting, if their absence will compromise the Committee's expertise, or if they are invited to speak on 'matters of fact'.
 - NERC will remove all papers and background information relating to a vested interest from the respective member's meeting papers.
 - All Committee members are expected to abide by the *in confidence* nature of much of

the business conducted at meetings.

- All vested interests declared, and actions taken, should be recorded in the Committee minutes, ensuring a proper audit trail.

The meeting Chairperson must ensure that the above procedures are followed.

(*) For the purposes of this statement Committees is the generic term used for any group convened by, or acting on behalf of, Council or the Chief Executive.

**NERC STRATEGIC MANAGEMENT TOOL: Council
Overview of Strategic Objectives**

Knowledge & Partnerships

-1Q = +4Q

- 1: Strategic partnerships with key UK and international organisations are supporting research delivery
- 2: Promote collaborative research & a vibrant community throughout the environmental science, engineering & technology base.
- 3: Establish a culture of knowledge exchange between NERC and stakeholders and ensure knowledge generated from NERC-funded science, and data and information holdings, are communicated and used.
- 4: Build and maintain effective working relationships with DIUS.

Resource & Process Management

-1Q = +4Q

- 16: Ensure that NERC's national capability meets the needs of current priorities
- 17: Have skilled people to deliver NERC's strategy
- 18: Run an efficient, effective & flexible organisation to deliver NERC's strategy whilst demonstrating sound governance

Research Outputs

-1Q = +4Q

- 5: Climate system theme: develop risk-based predictions of the future state of the climate on regional & local scales, from days to decades
- 6: Biodiversity theme: understand the role of bio-diversity in key ecosystem processes
- 7: Sustainable use of natural resources theme: provide the science to optimise the use of renewable & non-renewable natural resources whilst living within the Earth's environmental limits
- 8: Earth system science theme: increase knowledge of the past & present behaviour of Earth to enable predictions of future change
- 9: Natural hazards theme: increase knowledge to improve the forecasting & mitigation of natural hazards
- 10: Environment, pollution & human health theme: provide science to reduce damaging health effects of pollutants & pathogens
- 11: Technologies theme: develop the tools & technologies needed for cutting-edge environmental science

Future

-1Q = +4Q

- 12: Responsive Funding: Support cutting edge & emerging areas of science through responsive mode research
- 13: Develop NERC's national capability to meet future priorities
- 14: Develop skilled people (to ensure a healthy environmental science base) to meet future science priorities
- 15: Adapting the organisation for strategic risk management – seizing opportunities and mitigating threats.