



Business Plan 2005



**British
Antarctic Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

**BUSINESS
PLAN
2005**

Executive Summary

BAS Business Plan 2005 sets the agenda and priorities for the Survey to achieve its Mission during Financial Year 2005/06. The Plan is relevant to everyone in BAS and is published on the BAS Intranet (<http://basweb.nerc-bas.ac.uk/busplan/>).

BAS Vision

BAS aspires to become by 2012 the Leading International Centre for Global Science in the Antarctic Context.

BAS Mission

The BAS Mission is to undertake a world-class programme of scientific research and to sustain for the UK an active and influential regional presence and a leadership role in Antarctic affairs.

BAS Priorities for Financial Year 2005/06

- Start the new quinquennial programme, Global Science in the Antarctic Context 2005-10.
- Synthesise the results of the previous quinquennial programme, Antarctic Science in the Global Context, 2000-05.
- Continue to develop and implement strategic plans to achieve the BAS Vision.
- Maintain the emphasis on staff development, including cultural values.
- Make further improvements in the operational planning processes.
- Continue action to improve environmental management.
- Take forward the BAS Information Management Strategy.
- Maintain expenditure within budget guidelines.
- Maintain a leading role in planning for the International Polar Year 2007/08.

Resources

The BAS budget is in balance over the period of the Plan. The Survey continues to improve the way in which it manages capital and resource expenditure separately. Volatile fuel prices are a key financial risk. It is imperative that expenditure is held within budget and the BAS Board will impose appropriate controls should it become necessary to avoid an overspend in 2005/06.

BAS BUSINESS PLAN 2005

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1. Foreword by Director

The BAS Business Plan 2005 sets out the agenda and priorities for the Survey during Financial Year 2005/06. The plan is relevant to everyone in BAS and provides a valuable summary for the many external bodies who have an interest in what we do and how we do it. This year is especially significant, as it marks the start of our new core research programme “Global Science in the Antarctic Context” (GSAC). The programme is the primary means by which BAS will achieve its Vision of becoming the international leader exploiting the exceptional importance of the Antarctic and the surrounding Southern Ocean to achieve key insights into global phenomena and scientific fundamentals. GSAC will build on the success of its predecessor programme, “Antarctic Science in the Global Context” (ASGC). Emphasis will be placed this year on the synthesis of results from ASGC to maximise the return on the effort and money invested. These and the other priorities described in the Business Plan all contribute to a core objective of achieving excellence in all that we do. I commend the clarity and transparency of the document, and recommend it as a reference source of information about our activities in an exciting and historic year.

2. Scope and Purpose of the Plan

2.1 BAS Business Plan 2005 sets the agenda and priorities for the Survey to achieve its Mission during Financial Year (FY) 2005/06; it also informs planning over the succeeding 3 years. The Business Plan is consistent with the Natural Environment Research Council (NERC) Delivery Plan and the financial allocations to BAS. Its construction has been guided by the planning assumptions at Table 16. The Plan has been approved by the BAS Board and is to be used to shape the management and work of BAS during 2005/06. The Plan is relevant to the work of everyone in BAS and is published on the BAS Intranet (<http://basweb.nerc-bas.ac.uk/busplan/>).

2.2 **NERC Mission and Strategic Aims.** BAS activity contributes to NERC’s mission and strategic aims, which are listed in Table 16.

3. The BAS Vision

BAS aspires to become by 2012 the Leading International Centre for Global Science in the Antarctic Context.

4. BAS Strategic Priorities to 2012. To achieve the Vision, BAS will:

- Focus our work on relevant key global or basic science issues.
- Achieve excellence in delivering science using best practice.
- Lead national and international science partnerships.
- Achieve worldwide public recognition for excellence.
- Maintain a British presence in the Antarctic.
- Minimise our effects on the environment.
- Build a top quality, professional workforce.

The BAS Board continues to develop implementation plans to take forward these strategic objectives.

5. The BAS Mission

- To undertake a world-class programme of scientific research, survey and long-term observations, addressing key issues of global or fundamental importance that can best be dealt with by research requiring access to the Antarctic or related regions.
- To sustain for the UK an active and influential regional presence, and a leadership role in Antarctic affairs.
- To maintain an integrated, well-managed national capability to support the overall NERC science strategy, to exploit research outcomes, and to raise public awareness worldwide.
- To assist in the discharge of the UK's international responsibilities under the Antarctic Treaty System and with the administration of the British Antarctic Territory.
- To provide reliable and independent advice to the UK government and other stakeholders, contributing to the effectiveness of UK public services and policy.
- To provide a focus for national and international cooperation, and for the coordination of major research programmes, especially those addressing complex scientific problems or requiring significant technology or infrastructure.

6. Overall BAS Objectives

BAS is required to implement its programme of Core Strategic research, approved by NERC Council, within the allocated resources monitored by the BAS Review Group. The programme is consistent with NERC's Science and Innovation Strategy and with the Government's objectives as identified by the Foreign and Commonwealth Office (FCO). Additional research activities are funded by NERC thematic and non-thematic grants, the European Union, and a variety of other sources, including commercial contracts and the Antarctic Funding Initiative. Support is also provided to the FCO, as part of the BAS Mission. Opportunities are taken to earn income from BAS assets and skills when that does not conflict with the core programme.

7. BAS Culture

BAS promotes the core expectations that NERC has defined for its staff and aspires to a culture that is:

- Positive – Positive attitude, energy, realism, enjoy the work.
- Responsible – Safety conscious, environmentally friendly, accountable for one's actions, honourable, ethical, open and fair.
- Imaginative – Creative, flexible, thinking of better ways, constructively challenging, learning from experience, problem solving, entrepreneurial and outward looking.
- Cooperative – Open, communicative, caring and loyal to one another, working in the best interests of BAS and science.
- Excellent – Professional, efficient and effective, successful and recognised, high quality, applying best practice and developing our people.

The BAS cultural values are an important element when judging peoples' performance and the contribution that individuals make to the Survey. Action continues to embed the cultural values into day-to-day business processes.

8. Business Plan 2005 Priorities for Financial Year 2005/06

- Start the new quinquennial programme, Global Science in the Antarctic Context 2005-10.
- Synthesise the results of the previous quinquennial programme, Antarctic Science in the Global Context, 2000-05.
- Continue to develop and implement strategic plans to achieve the BAS Vision.
- Maintain the emphasis on staff development, including cultural values.
- Make further improvements in the operational planning processes.
- Continue action to improve environmental management.
- Take forward the BAS Information Management Strategy.
- Maintain expenditure within budget guidelines.
- Maintain a leading role in planning for the International Polar Year 2007/08.

9. Global Science in the Antarctic Context (2005-10), Q4

9.1 This Plan marks the first year of the new five-year core programme over the period 2005/06 to 2009/10, Global Science in the Antarctic Context (GSAC). The new programme is the fundamental step to achieving the BAS Vision. GSAC expands the Survey's activities, even though the plans had to be de-scoped to make them affordable within the enhanced budget approved by Council in June 2004. The programme includes a larger element of non-Antarctic work, and involves the recruitment of over 20 new staff for the science divisions. The GSAC field work increases the utilisation of BAS logistics, with the ships and aircraft almost fully committed over the 5 years.

9.2 GSAC was internationally peer reviewed and judged to be in the top 25% of world science. The programme comprises eight core research programmes (listed in Table 16), each with up to four projects. The individual projects are closely integrated so that their science output can be synthesised to address larger and more complex scientific problems. The eight programmes have also been constructed so that they complement each other and offer further scope for integration at a higher level. GSAC is managed through a matrix structure with Principal Investigators (PIs), responsible to the Head of Science Programmes, leading the science and with the Heads of the Science Divisions (Science HoDs) managing the budgets and delivering the agreed outputs. The PIs and the Science HoDs work together to strike the best balance between the efficient use of the available resources and the achievement of world-class science. The PIs are responsible for ensuring with the Science HoDs that adequate monitoring procedures are in place to assess progress towards delivery.

9.3 The balance of the BAS core programme consists of:

- Long Term Monitoring and Survey (LTMS)
- Four IMP Projects

- Support to the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)
- The Antarctic Funding Initiative (both support and participation)
- Lifetime of Halley project
- Science Infrastructure (Well Found Laboratories)
- BAS Collaboration Fund (BCF)

9.4 Grants, Commissioned and Co-funded Research. BAS supplements its resources through applications to a wide range of funding bodies including NERC thematic & non-thematic rounds, the Antarctic Funding Initiative (AFI), European Union, Leverhulme Trust and other bodies. Opportunities may arise to undertake commissioned research or co-funded research for government departments, overseas agencies or private industry. Staff are encouraged to seek additional funds to carry out work that either complements the BAS core programme or can be seen as innovative work that might sow important seeds for new developments. However, the impact of additional projects on core activities needs to be considered carefully. Staff must discuss emerging ideas with their line manager, Science HOD and PI. The relevant Science HoD, PI when appropriate, and the Director must approve all bids before submission. The Science Coordination Group can provide advice on procedures and potential sources of funds. The Science Coordination Group should also be consulted by staff well in advance of grant deadlines to ensure they are aware of the new procedures and timescales for electronic submissions and full economic costing.

9.5 Science Review. BAS established an Integrated Programme Review Committee (IPRC) in 2001 to monitor all core-funded science programmes. The IPRC has a high quality national and international membership to give BAS independent advice on the progress and quality of programme delivery. The IPRC's final review of the Antarctic Science in the Global Context programme will take place this year and its first review of GSAC will be in 2006.

9.6 Reporting on AGSC. BAS has a structured approach to reporting the outputs of the previous quinquennial programme, ASGC, to the IPRC, NERC, the wider science community and the general public. The reports will highlight major achievements that have:

- Opened up new science areas.
- Solved major problems in specific areas.
- Changed approaches in the international community.

Each ASGC Programme will produce synthesis papers to be published in high impact journals, and BAS will publish an overall document summarising the achievements. The IPRC will review the reports in October 2005.

10. Collaboration and Partnerships

10.1 UK Collaboration. BAS is intent on developing stronger links and collaborations within the UK, across NERC, with HEIs and with Government departments. The existing scientist-to-scientist collaborations with BGS, CEH, and NOC provide a foundation for further developments in GSAC. Action continues to agree strategic partnerships with HEIs, including Bristol, UCL and UEA, and to foster strong relationships with DEFRA. All such arrangements will be codified, normally in Letters or Memoranda of Understanding (LOUs or MOUs), under

the process managed by the Science Coordination Group. The GSAC financial allocations provided money for a BAS Collaboration Fund to facilitate better collaborative links.

10.2 International Leadership. The leadership of international partnerships is a strategic BAS priority, in line with NERC's requirement for Research Centres to provide a focus for international cooperation and the coordination of major programmes solving complex scientific problems. BAS encourages its staff to be proactive in hosting international conferences and in the development of links in the international arena, building on the Survey's world-class science programme and its leadership role for the UK in Antarctic affairs. BAS is seeking to manage at least one large, international scheme under the European Commission's Framework Programmes, and is hosting the International Programme Office for the International Polar Year.

11. Antarctic Funding Initiative (AFI)

Some £1.5M/year was removed from the annual BAS financial baseline to fund AFI. The Initiative is administered by NERC, but with a coordinator located at BAS to deal with day-to-day liaison with grant holders and other interested parties. AFI supports proposals for research grants for field work in the Antarctic from BAS staff, UK universities and other NERC Centres/Surveys. The BAS Science and Management Audit (SMA) in September 2002 concluded that AFI is working well and is set at the appropriate long-term level. The financial arrangements and BAS AFI allocations are at Table 14. Further details on the AFI programme are available on <http://www.antarctica.ac.uk/afi/>. BAS will codify the procedural relationships with NERC for the management of AFI during 2005.

12. Knowledge Transfer and Commercialisation

BAS is committed to supporting the Government objectives to increase the transfer of science and technology knowledge to the private sector for the commercial benefit of the UK as a whole. NERC has formed a partnership with ISIS Innovation Ltd, the technology transfer company of the University of Oxford, to provide expertise in taking ideas to the commercial market. ISIS and the NERC exploitation scouts will work together to help research centres identify and develop ideas. In 2005/06, NERC will again set commercialisation targets for Research Centres such as the number of new commercial ideas generated and the number of innovation awards. Commercialisation is not easy. BAS takes the view that there must be a champion to drive an idea forward if it is to have a serious chance of success. BAS needs to identify a minimum of 6, viable new ideas during 05/06.

13. International Polar Year (IPY 2007- 2008)

13.1 The IPY 2007-2008 is an exciting and challenging concept which will take place 50 years on from the 1957/58 International Geophysical Year. Over 30 nations, and many of the key international science groups have committed to IPY 2007-2008 which is sponsored by the International Council for Science (ICSU) and the World Meteorological Organisation (WMO). In response to an Announcement of Opportunity, over 850 Expressions of Intent for IPY 2007-2008 research activities have been put forward world-wide.

13.2 BAS is taking a leading role in the IPY 2007-2008. Director BAS is a member of the Joint Committee established by ICSU and WMO to oversee the planning and implementation of the programme. BAS is hosting the International Programme Office, which is funded by NERC. IPY 2007-2008 offers excellent opportunities for collaborative science, and new NERC grant funds will be available for bids to extend GSAC work into the Arctic. It will be essential for BAS to maintain a central overview of the Survey's overall IPY involvement and commitments, and the Science Coordination Group must be informed as soon as initial discussions of IPY-related science occur.

14. Research Studentships within BAS

14.1 BAS is committed to maintaining a vibrant community of research students within the organisation. Research students are seen as vital to the maintenance of strong research groups and project teams, and thus to the achievement of key aspects of the BAS Vision. It is our aim to maximise the benefits of having students at BAS, within the normal bounds of sustainability.

14.2 At present BAS supervises some 70 research students, of whom some 40 work either full or part-time at BAS Cambridge. All aspects of the admission, management and training of students are contained within the BAS Student Manual, which is placed on the Intranet. BAS currently enjoys recognised research institute status with both the Open University and the University of Cambridge. The BAS Board keeps under review how best to run a student programme that is vibrant, manageable and producing valuable outputs. BAS will normally agree joint studentships with University Departments rated as 5-star. For further information on students see <http://basweb.nerc-bas.ac.uk/student-information/>.

15. Information Management

A new Information Management Strategy Committee (IMSC) was established in 2004 to develop and oversee the strategies for the management of all BAS data and information (<http://basweb.nerc-bas.ac.uk/irm/strategies.html>). The IMSC is supported by committees focusing on specific information aspects to produce a coherent approach to meeting IT, data and communication needs. This work includes making the Survey's extensive data holdings more accessible and action to renew the BAS website.

16. Support to the Foreign and Commonwealth Office (FCO) and Other Government Departments

16.1 FCO. BAS provides a range of support to the FCO as part of its mission to sustain for the UK an active and influential regional presence and a leadership role in Antarctic affairs. This includes administrative responsibilities for the British Antarctic Territory. Action continues to clarify and codify the support provided from BAS resources and that which is provided to the FCO on repayment. Any new requests for FCO support that have additional resource implications should be referred to the Directorate.

16.2 BAS also has a responsibility to provide scientific advice to policy makers in other Government Departments. For example, DEFRA is particularly interested in the results of BAS research on climate change and the ecosystem management of fisheries.

17. Science in Society

BAS is engaged in a wide-ranging body of activities to bring home the importance of Antarctic science to the general public. In addition to a proactive media relations programme, BAS hosts a Writers and Artists Programme; the Programme is designed to bridge the gap between the worlds of science and the arts, and is open to all types of scholars and practitioners from the humanities. BAS is also developing innovative educational partnerships to reach young people. The BAS web site provides more educational material with particular emphasis on primary education (www.antarctica.bas.ac.uk/schoolzone).

18. Management of Externally Funded Projects

18.1 Whenever appropriate, BAS manages its externally funded projects separately and transparently, with discrete income and expenditure tables. The main projects handled in this manner are the NERC Arctic Station, Port Lockroy and South Georgia. The fundamental principle, however, is that all external arrangements with a call on BAS resources are to be codified through a MOU or LOU.

18.2 **South Georgia.** BAS took over the UK's presence in South Georgia from the Ministry of Defence in March 2001. The arrangements that define this commitment are set out in an MOU between BAS and the FCO and the Government of South Georgia & the South Sandwich Islands (GSGSSI). The MOU requires BAS to operate a research station at South Georgia for the FCO and the GSGSSI. The South Georgia Project does not spend money from the Science Vote, and the use of BAS resources, such as ship time, is charged to the Project; the Project budget is summarised at Table 11.

19. Environmental Management

19.1 **Environmental Office.** Environmental issues are gaining increasing prominence within the Antarctic Treaty System, and 'minimising our effects on the environment' is a strategic priority to achieve the BAS Vision. The BAS Environmental Office has therefore been increased to 3 people by the addition of an Environmental Research & Survey Manager. The role of this manager is to act as a catalyst for environmental activity, with the research conducted by the science divisions.

19.2 **Abandoned Facilities.** BAS has recently completed a major programme of work to remove abandoned facilities and waste dumps to satisfy Antarctic Treaty requirements. The removal of other legacy facilities or old buildings when bases are redeveloped is now part of business as usual. Funding is provided from 'provisions' in the NERC accounts.

19.3 **Sustainable Energy.** BAS still has much to do to implement its sustainable energy strategy that was agreed in 2002. Energy monitoring equipment is being installed at stations and a greater emphasis is being placed on the need to manage energy demand on base. Sustainable energy solutions will be introduced on stations, as finances allow. A Sustainable Energy Manager post will be established, through reorganisation, to support the Building Section and the Environmental Office.

19.4 **'Greening of NERC'.** BAS is providing the chair of the corporate group that is taking forward the initiative known as the 'Greening of NERC'. The aim is to develop policies and plans to improve the way in which NERC and its Research Centres manage their activities in an environmentally-friendly manner.

20. Finance

20.1 **Income and Expenditure.** BAS income and expenditure over the 4 years to 2008/09 are summarised at Table 1. The figures reflect the Council approved allocations for GSAC, Halley VI funding and overspends from previous financial years. Science Budget income is indexed for inflation, and expenditure planning includes an allowance for inflation and unfunded requirements.

20.2 **Affordability of the BAS Programme.** Whilst there are a number of uncertainties, the BAS Board judge that the budget is balanced and manageable, having de-scoped GSAC by up to £450k year. Fuel price volatility is a key risk and the budget provides an extra £400k/yr for fuel, based on a 'proxy' price of \$40/barrel for Brent crude. The 'proxy' price, however, is only a broad indicator because the purchase price is also affected by exchange rates

fluctuations and by where the fuel is bought. The budget is therefore calculated on the average of what BAS actually paid in 04/05 when Brent Crude was at the \$40/barrel level. On that basis, each \$1 change in the average Brent crude price equated to £47k/year in BAS fuel expenditure.

20.3 Managing BAS Budgets. BAS budget managers are generally effective in managing within their financial allocations. However, the Survey still needs to improve further the way in which it now has to manage capital and resource expenditure separately. Action will therefore continue with budget holders to achieve better forecasting and to ensure that all allowable expenditure is capitalised. The BAS Board will impose appropriate controls should that become necessary to avoid an overspend in 05/06.

20.4 NERC Funding Framework (NFF). The NFF is a NERC business tool for strategic resource management and monitoring to provide a more level playing field for funding awards; opening up funding opportunities to greater competition; facilitating collaboration between Research Centres, with stakeholders, across the NERC/university boundary, and between Research Councils. The NFF has 10 categories including strategic data & knowledge, research centre capability, infrastructure and science & society. These categories are used in the NERC plans but not in this Plan because they are not applicable to budget-holder management within the Survey.

20.5 Capital Investment Programme. The summaries of projected capital and other significant expenditure by division are at Tables 8-10. Whilst the inclusion of an item in a table means that money has been provisionally earmarked, that does not imply that the project has been approved. Appropriate formal approval to proceed is required before a budget holder commits funds. Options, supported when necessary by investment appraisals, are likely to be required for the larger projects – especially for enhancements to the logistic infrastructure.

20.6 Pricing Guidance. Table 17 provides costing and pricing guidance when bidding for external funds or tasks. Special arrangements apply to certain schemes, such as EU and AFI, whilst others involve a judgement within the overall public accounting guidelines. Advice should be sought from the Finance Section or Head of Administration & Logistics when required. Changes to UK Research Council Grant applications, to incorporate a percentage of full economic costs, come into effect in September 2005. Bids to use a proportion of any overheads won will not be allowed in 05/06 because of the Survey's overall financial position.

20.7 Flexibility. Some 2% has been allowed in the budget from 06/07 to provide management flexibility to deal with essential infrastructure requirements, new needs, non-pay inflation and, as far as possible, any further oil price shocks. This flexibility is already under pressure, and over 75% of the money may have to be allocated to already known essential requirements, such as the upgrading of ships' systems. Further flexibility funds will thus need to be generated by improved efficiency and by winning more external income. The Board will consider the affordability of priority requirements for the next Business Plan before the end of 2005.

21. Supporting Science

21.1 The maintenance of research stations, ships, aircraft and well-found laboratories is funded in accordance with the Planning Assumptions at Table 16. The planning for field operations seeks to optimise the use of the logistic infrastructure for approved science and its support, within the available capacity and funds. The Operations Group will continue its programme of work to improve the effectiveness of the planning and coordination of field activity and the management of aircraft, ship and research station programmes.

21.2 Shipping. BAS shipping operations are complex, effective and widely regarded as being delivered in a professional manner. They are also expensive and consume over a quarter of BAS resources. The scope for improvements in the planning, management and support of marine operations is therefore kept under regular review by both BAS and NERC. The BAS objectives for shipping during 2005/06 include:

- The improved identification of ship-related costs, especially to help validate the charging rate for the NERC use of the JCR.
- A marine management workshop to identify improvements in the way Cambridge and the ships work together.
- The continued development of the Ships Planning Group as the mechanism for thinking through longer term issues.

21.3 Rothera. Following independent advice, a phased redevelopment plan has been developed for Rothera. This will be a major undertaking over a number of years, including the replacement of site services and the introduction of sustainable energy solutions. Progress will depend on when money is available. The first phase of redevelopment starts in the 05/06 season.

21.4 Bird Island. The major programme to upgrade the Bird Island facilities was implemented in 04/05. The 05/06 season programme involves finishing-off work and the removal of the old facilities.

21.5 Halley. The Halley station has to be replaced and the existing station (Halley V) removed by 2010, because of the risk of the ice-shelf calving. The Project is funded and most of the construction work for Halley VI is planned for 2006/07 and 2007/08. The main tasks in 2005/06 are to select the design and to work with the BAS construction partner (Morrison) to plan the construction.

21.6 Project Management. NERC has adopted PRINCE 2 as its project management methodology. BAS has used this approach since 2001 and continues to apply it more widely. The GSAC capital acquisitions will be assessed to establish those that need to be managed as formal projects.

21.7 Staff Development and Training. BAS is committed to improving staff development and training. The Investors in People accreditation will be reassessed in May 2005 and the Personnel team are leading action with the help of the Staff Development Working Group. Throughout this process of continuous improvement there is the need to maintain the emphasis on good communication both up and down the line management chain, with section heads and the newly established science group heads playing a pivotal role. The BAS Board conducts annual formal reviews of training & development and personnel issues. The BAS focus for staff training and development in 2005/06 is:

- Line Management
- Team Skills
- Selection Panel skills
- E-appraisal for Cambridge staff (refresher and induction)

21.8 Appraisals and Forward Job Plans. Whilst BAS has separate appraisal processes for Cambridge-based staff, aircrew, seafarers and those on Antarctic contracts, the purpose of appraisal is the same for everyone. Effective appraisal enables staff and line managers to consider performance, review what has been achieved, agree the tasks to be done in the

period ahead (i.e. a Forward Job Plan (FJP)) and identify developmental needs. Line managers have a key role in ensuring both constructive appraisal and the provision of regular feedback to their staff throughout the year. NERC is seeking upper quartile performance for upper quartile public sector pay, and line managers are expected to provide timely help and guidance if performance is weak in any area.

22. Mandatory Requirements

22.1 BAS strives to implement employment, safety and other workplace legislation effectively and pragmatically. This includes maintaining a culture that is ethical, non-discriminatory and safety conscious.

22.2 **Safety.** BAS aims to be positive, open, pragmatic but compliant in its approach to health and safety. BAS safety policy is firmly embedded in the NERC Safety Management System, tailored in detail to meet the special needs of the BAS operation. A 'just' approach to accident, incident and near-miss reporting has been introduced, in a way that will continue to allow our safety performance to be improved through lessons learnt from experience. BAS commissions an independent audit of its safety performance once per year.

22.3 **International Safety Management (ISM).** ISM is an international maritime safety standard that all ship operators must meet. BAS Cambridge, the *James Clark Ross* and the *Ernest Shackleton* achieved initial accreditation during 2002. The Maritime & Coastguard Agency now audits Cambridge annually and the ships every 2¹/₂ years. These audits also cover the International Ships and Ports Security Code (ISPS).

22.4 **Antarctic Permits.** BAS activities in Antarctica are regulated by FCO permits under the Antarctic Act 1994. This requires the regular reapproval of BAS activities, including permission for significant changes, such as the use of genetically modified organisms. All planning for science projects and programmes and their support must satisfy the permitting regulations. BAS works with the FCO to simplify the bureaucratic processes for permitting.

22.5 **Risk Management.** NERC has established a risk management policy and a risk strategy to meet Treasury corporate governance requirements. The purpose is to ensure that organisations identify, evaluate and manage their key risks. Head of Administration and Logistics is the BAS Risk Manager, and the risk register is on the Intranet (<http://basweb.nerc-bas.ac.uk/busplan/risk-register.pdf>). All BAS Board papers include a mandatory assessment of the risk implications.

22.6 **Business Continuity Management.** BAS will develop a structured approach to Business Continuity Management (BCM) to meet NERC-wide corporate governance requirements. This will largely entail drawing together the plans already in place across the Survey.

23. Objectives and Performance measurement

23.1 **BAS Objectives.** Table 18 lists the Business Plan performance and change objectives. The purpose of the objectives is to identify those activities, either across divisions or within a division, that are judged by the BAS Board as important to the aims and support of the Survey. The objectives are also designed to provide a continuity of purpose over a number of years; they are to be given priority when deciding the allocation of resource and/or management effort. The BAS Board regularly reviews the objectives and the target dates in the light of experience.

23.2 **Performance Measurement.** BAS uses a performance measurement system to enable the Board to review progress quarterly against the Business Plan objectives in Table

18. The BAS Instrument Panel (BIP) is also used to provide a broad range of high level indicators, covering the delivery of science and support, financial performance, change of activity and personnel issues, to give a balanced picture of performance across the Survey. A key purpose of the BIP is to drive action to achieve the BAS Vision by 2012. These two performance measurement systems allow BAS senior management to monitor progress and adjust priorities or the allocation of resources.

Table 1

INCOME AND EXPENDITURE SUMMARY

	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan	Four Year Totals
INCOME					
International Polar Year	152	157	151	152	612
Core Infrastructure	25,616	26,157	26,787	25,597	104,156
GSAC Science Resource	8,978	9,806	10,134	10,968	39,886
GSAC Science Capital	1,322	894	766	232	3,214
Arctic Station	156	149	151	154	610
NERC use of JCR	691	708	724	741	2,864
Bases environmental clean-up	848	572	1,558	1,651	4,629
Twin Otter Repairs	-	(100)	(100)	(100)	(300)
Antarctic Allowances loan	200	(40)	(40)	(40)	80
To recover 02/03, 03/04 & 04/05 overspends	(1,613)	(400)	-	-	(2,013)
Reprofile allocation (GSAC)	1,000	1,000	(1,000)	(1,000)	-
GSAC Transitional Costs	157	-	-	-	157
NERC Capital Strategy	147	515	573	(785)	450
Core Capital	697	756	828	2,719	5,000
Halley 6	4,390	6,840	9,850	2,460	23,540
Rothera Redevelopment Phase 1	1,500	1,920	180	-	3,600
Total Allocation (INCLUDES INFLATION)	44,241	48,934	50,562	42,749	186,485
Other					
External	3,046	2,992	2,752	2,823	11,613
Internal	1,449	855	636	781	3,722
Total	4,495	3,848	3,388	3,604	15,335
TOTAL FUNDS AVAILABLE	48,736	52,782	53,950	46,353	201,820
EXPENDITURE					
Science Q4 (includes pay inflation)	10,017	10,329	10,036	9,263	39,645
Science External	397	358	271	145	1,171
AFI	466	438	433	451	1,788
Support	31,926	32,002	30,963	30,117	125,008
Other Expenditure - Table 4	87	55	56	57	255
Halley 6	4,390	6,840	9,850	2,460	23,540
Arctic Station	156	149	151	154	610
South Georgia	1,134	1,299	1,123	1,322	4,877
Port Lockroy	100	4	-	-	104
Transitional funding - Antarctic Allowances	100	90	10	-	200
Flexibility	(37)	1,218	1,057	2,384	4,622
TOTAL EXPENDITURE	48,736	52,782	53,950	46,353	201,820
NET DEFICIT (SURPLUS)	(0)	(0)	(0)	(0)	(0)
RESOURCE CAPITAL :					
Tables 8 and 10	4,301	3,706	1,309	669	9,985
Halley 6	4,390	6,840	9,850	2,460	23,540
Major Projects Table 9	557	1,464	1,404	630	4,055
TOTAL	48,736	52,782	53,950	46,353	201,820

Table 2

INCOME SUMMARY

	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan
EXTERNAL - SIGNED				
ES Summer Charter	926	926	926	926
Dutch at Rothera	85	85	85	85
EU/FP5 Funding	23	-	-	-
FCO for BAT	50	50	50	50
APC	12	12	12	12
South Georgia	1,150	1,299	1,145	1,300
South Georgia - banking b/f	-	-	0	22
Port Lockroy	100	4	-	-
Total	2,329	2,376	2,219	2,396
EXTERNAL - PREDICTED				
Ship hire estimated	50	50	50	50
South Georgia overheads	263	265	278	275
External Projects	276	239	144	38
EID Income	83	22	22	25
Miscellaneous & disposals	30	30	30	30
Arts Council	14	10	10	10
Total	716	616	534	428
TOTAL EXTERNAL INCOME	3,046	2,992	2,752	2,823
INTERNAL INCOME				
Thematic	194	142	15	-
Cook Fellowship	60	63	66	46
AFI non Thematic confirmed	348	228	118	25
AFI non Thematic estimated	-	91	195	303
AFI Project Management	58	59	60	62
AFI Top Slice	50	50	50	50
AFI CGS Costs	10	10	10	11
AFI Infrastructure Costs		76	-	-
Clean Up Ship Time	178	122	108	269
Port Lockroy overheads	13	1	-	-
Arctic Station overheads	11	11	11	12
SPRI 50%	17	-	-	-
Finance Foreign Payments	3	3	3	3
Linux	246	-	-	-
NAV	254	-	-	-
Office Services Income from Swindon	8	-	-	-
TOTAL INTERNAL INCOME	1,449	855	636	781
TOTAL INCOME	4,495	3,848	3,388	3,604

Table 3

MANPOWER & STAFF COST PROFILE - BAS POSTS

	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan
SCIENCE				
<u>BSD</u>				
Basic Pay	2,061	2,058	2,104	2,057
National Insurance	165	165	169	165
Pensions	210	209	213	208
Allowances	123	166	172	156
	2,559	2,598	2,659	2,587
<u>GSD</u>				
Basic Pay	808	879	921	922
National Insurance	66	72	75	75
Pensions	84	90	95	94
Allowances	110	59	74	26
	1,068	1,101	1,166	1,117
<u>PSD</u>				
Basic Pay	2,429	2,567	2,602	2,601
National Insurance	199	210	213	213
Pensions	251	265	269	268
Allowances	127	237	209	120
	3,005	3,279	3,293	3,202
<u>EID</u>				
Basic Pay	86	86	86	87
National Insurance	7	7	7	7
Pensions	8	8	8	8
Allowances	0	0	0	0
	101	102	102	102
Turnover Allowance - Science	0	0	0	0
TOTAL SCIENCE	6,733	7,080	7,220	7,009

continued overleaf

SUPPORT DIVISIONS				
<u>EID</u>				
Basic Pay	598	609	620	632
National Insurance	46	47	48	48
Pensions	58	59	61	62
Allowances	19	19	19	19
	721	734	748	761
Turnover Allowance - EID	(14)	(15)	(15)	(15)
TOTAL EID	707	720	733	746
<u>Administration & Logistics</u>				
Basic Pay	7,503	7,570	7,712	7,856
National Insurance	584	596	607	618
Pensions	619	631	643	654
Allowances	536	536	536	536
	9,242	9,333	9,498	9,664
Turnover Allowance - ALD	(185)	(187)	(190)	(193)
TOTAL ALD	9,057	9,146	9,308	9,471
TOTAL PAY				
Basic Pay	13,484	13,770	14,046	14,155
National Insurance	1,067	1,097	1,120	1,126
Pensions	1,229	1,263	1,290	1,295
Allowances	916	1,018	1,011	857
	16,696	17,147	17,467	17,434
Total Turnover Allowance	(199)	(201)	(205)	(209)
Antarctic allowance loan	100	90	10	
TOTAL	16,597	17,036	17,272	17,225

Notes:

(1) Turnover allowance of 2% on ALD & EID only - recruitment delay already included in Q4 for 05/06

(casuals are charged to division budgets).

(2) Overtime and allowances are delegated.

For Information Only

<u>External</u>				
BP/NI/P/Alls	867	849	817	742
No AFI or overheads				

Table 4A

SUMMARY OF TOTAL EXPENDITURE

	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan
SCIENCE				
Pay	6,733	7,080	7,220	7,009
<u>Programmes</u>				
Bioscience Q4	1,181	1,214	1,119	879
Bioscience external	71	76	79	53
Geosciences Q4	394	300	364	310
Geosciences external	5	5	5	5
Physical Science Q4	1,689	1,711	1,309	1,038
Physical Science external	321	277	187	87
EID Q4	20	24	24	28
AFI	466	438	433	451
	10,880	11,124	10,740	9,859
SUPPORT DIVISIONS				
<u>EID</u>				
Pay	707	720	733	746
Operating Costs (inc Env Clean up)	1,390	1,054	2,031	2,149
<u>ALD</u>				
Pay	9,057	9,146	9,308	9,471
Administration	11,078	11,236	11,053	10,973
Technical Services	7,559	7,826	5,817	4,759
H&S and Cambridge Facilities	2,135	2,019	2,019	2,019
	31,926	32,002	30,963	30,117
TOTAL Science & Support	42,806	43,127	41,702	39,976
OTHER EXPENDITURE				
Supplier File/foreign payments	53	55	56	57
BEMMA	34			
Halley 6 Project	4,390	6,840	9,850	2,460
Arctic/SG/PL/Q4/AA/Wedge	1,452	2,760	2,341	3,860
TOTAL EXPENDITURE	48,736	52,782	53,950	46,353
INCOME	48,736	52,782	53,950	46,353
NET DEFICIT (SURPLUS)	(0)	(0)	(0)	(0)

Table 4B

SUMMARY OF ALD EXPENDITURE BY LOCATION, SHIP & AIR

	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan
ALD				
Pay	9,057	9,146	9,308	9,471
Locations				
Bird Island	452	203	126	125
Signy	125	260	112	110
Rothera	3,073	3,899	2,031	1,727
Halley	1,187	1,218	952	1,015
Stanley	118	122	122	122
	4,956	5,702	3,343	3,098
Ships				
JCR	3,566	3,476	3,711	3,313
ES	5,178	5,303	5,407	5,058
	8,744	8,779	9,119	8,371
Air				
Dash 7	476	554	479	479
Twin Otters	1,210	1,231	1,156	1,081
	1,685	1,785	1,635	1,560
Facilities Management	1,048	983	983	983
Directorate	154	141	138	141
Science Coordination Group	282	233	258	226
IPY	152	157	151	152
RASOR	254	76	-	-
Linux	246	-	-	-
Cambridge	3,251	3,227	3,264	3,220
TOTAL	29,829	30,229	28,198	27,222

Table 5

SUMMARY OF TOTAL EXPENDITURE BY PROGRAMME

		05/06	06/07	07/08	08/09
		£000's	£000's	£000's	£000's
		Budget	Plan	Plan	Plan
Science					
Programme	Programme Leader				
ACES	John King	355	265	239	183
BIOFLAME	Alex Rogers	243	286	276	133
CACHE	Eric Wolff	429	398	312	277
DISCOVERY 2010	Eugene Murphy	446	448	410	363
GEACEP	Alan Haywood	101	71	85	69
GRADES	David Vaughan	365	162	217	160
NC	Mervyn Freeman	73	98	98	98
SEC	Richard Horne	269	230	139	99
IMP-B	Andrew Clarke	23	23	23	23
IMP-B	Lloyd Peck	15	15	15	15
IMP-B	John Croxall	30	-	-	-
IMP-P	Richard Horne	15	15	15	15
LTMS-B	Andy Wood	138	198	175	144
LTMS-G	Phil Leat	14	15	15	17
LTMS-M	Adrian Fox	20	24	24	28
LTMS-P	Mike Pinnock	245	346	191	169
WFL-B	Andy Wood	210	216	197	176
WFL-G	Alistair Crame	60	82	96	80
WFL-P	Mike Pinnock	233	357	289	206
EXTERNAL BSD		71	76	79	53
EXTERNAL GSD		5	5	5	5
EXTERNAL PSD		321	277	187	87
		3,681	3,606	3,086	2,400

Table 6

SUMMARY OF TOTAL EXPENDITURE BY PROJECT
Includes Capital and Casual but no other payroll

		05/06	06/07	07/08	08/09
		£000's	£000's	£000's	£000's
		Budget	Plan	Plan	Plan
Division	Project				
GSD					
	BIOPEARL-G	10.00	32.00	31.00	30.00
	ISODYN	101.00	71.00	85.00	69.00
	LTMS-G	14.00	15.00	15.00	17.00
	PEP-G	44.00	31.00	35.00	31.00
	QWAD	165.00	69.00	102.00	83.00
	WFL-G	59.90	81.90	95.90	79.90
GSD EXTERNAL					
	STUA	5.00	5.00	5.00	5.00
BSD Q4					
	BIOPEARL-B	36.00	27.00	30.00	23.00
	BIOREACH	197.00	227.00	215.00	80.00
	CEMI	39.00	62.00	100.00	80.00
	FLEXICON	186.00	179.00	140.00	129.00
	FOODWEBS	181.00	172.00	135.00	124.00
	ACAIMP	23.00	23.00	23.00	23.00
	LPIMP	15.00	15.00	15.00	15.00
	JPCIMP	30.00	-	-	-
	LTMS-B	138.00	198.00	175.00	144.00
	OEM	40.00	35.00	35.00	30.00
	PEP-B	86.00	60.00	54.00	55.00
	WFL-B	209.90	215.90	196.90	175.90
BSD EXTERNAL					
	BLISS	1.42	-	-	-
	CROZET	9.62	13.15	13.48	6.91
	COOK FELLOWSHIP	60.00	62.60	65.55	46.32
EID					
	LTMS-M	20.25	24.00	24.10	27.90

continued overleaf

		05/06	06/07	07/08	08/09
		£000's	£000's	£000's	£000's
		Budget	Plan	Plan	Plan
PSD Q4					
	ACCENT	36.00	40.00	67.00	36.00
	CEFAC	137.00	135.00	71.00	38.00
	DRAM	143.00	147.00	118.00	121.00
	FOCAS	319.00	225.00	172.00	147.00
	HOLISTIC	105.00	145.00	52.00	51.00
	IMAGE	56.00	27.00	68.00	48.00
	RHIMP	15.00	15.00	15.00	15.00
	LTMS-P	245.00	346.00	191.00	169.00
	NCP	73.00	98.00	98.00	98.00
	PEP-P	19.00	25.00	34.00	32.00
	TIGRIS	144.00	66.00	47.00	29.00
	WARP	164.00	85.00	87.00	48.00
	WFL-P	232.90	356.90	288.90	205.90
PSD EXTERNAL					
	LIFEOFHALLEY	56.00	51.00	56.00	56.00
	SPACEWEATHER	6.06	-	-	-
	TSUSAT	14.74	-	-	-
	CRYOSTAT	7.77	-	-	-
	OPRIS	38.15	39.11	16.91	-
	AUIBSO	42.03	21.02	-	-
	ESSHGSLC	2.00	-	-	-
	RAPIDGL	19.98	-	-	-
	RAPIDISO	21.09	14.12	-	-
	EPICAMIS	27.00	53.00	12.00	-
	HIGEM	28.43	29.49	-	-
	DYNAMICS	2.45	-	-	-
	PIBMELT	55.43	69.11	101.63	30.95
TOTAL		3,681.12	3,606.29	3,086.37	2,399.77
TOTAL GSD (Q4)		393.90	299.90	363.90	309.90
TOTAL GSD (EXT)		5.00	5.00	5.00	5.00
TOTAL BSD (Q4)		1,180.90	1,213.90	1,118.90	878.90
TOTAL BSD (EXT)		71.04	75.75	79.03	53.22
TOTAL EID (Q4)		20.25	24.00	24.10	27.90
TOTAL PSD (Q4)		1,688.90	1,710.90	1,308.90	1,037.90
TOTAL PSD (EXT)		321.13	276.85	186.54	86.95

Table 7

SUMMARY OF TOTAL EXPENDITURE FOR SUPPORT DIVISIONS

	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan
Environment & Information:				
HOD	22	21	21	21
MAGIC	31	38	35	41
Data & Web	58	17	17	17
Environmental Management	105	108	110	118
Press, PR & Education	96	91	83	91
Photographic	31	32	32	32
Archives	36	36	36	36
Library	110	113	112	115
Artists & Writers	14	10	10	10
APC	12	12	12	12
IRM	27	4	4	4
Bases Environmental Clean up	848	572	1,558	1,651
	1,390	1,054	2,031	2,149
PAY	707	720	733	746
TOTAL EID	2,097	1,774	2,765	2,895
Administration & Logistics:				
Central	60	60	60	60
Directorate	154	141	138	141
Science Coordination Group	282	233	258	226
IPY	152	157	151	152
Finance	68	72	70	72
Medical	710	731	733	756
Operations Group	255	262	262	262
Ships Operations	3,559	3,559	3,564	3,559
Diving	49	41	41	41
Stanley	118	122	122	122
Air	1,800	1,863	1,713	1,638
Personnel	566	574	548	548
Purchasing	3,248	3,333	3,333	3,333
AMOS	57	89	61	63
Total Administration	11,078	11,236	11,053	10,973
Health & safety	65	73	73	73
Office Services	1,022	964	964	964
Facilities Management	1,042	976	976	976
Management of FM Contract	6	7	7	7
Total H&S and Cambridge Facilities	2,135	2,019	2,019	2,019
Buildings	624	803	555	601
Rothera Redevelopment Project	1,500	1,920	180	-
Bird Island Redevelopment Project	300	33	-	-
Technology and Engineering Central	91	92	90	90
Airborne and Survey Technology	99	38	36	36
Information & Communications Technology	1,013	1,175	1,146	961
Marine and Antarctic Engineering	2,931	2,930	3,176	2,493
Vehicles	500	760	635	579
RASOR	254	76		
Linux	246			
Total Technical Services	7,559	7,826	5,817	4,759
TOTAL	20,772	21,082	18,890	17,751
PAY	9,057	9,146	9,308	9,471
TOTAL ALD	29,829	30,229	28,198	27,222
TOTAL SUPPORT DIVISIONS	31,926	32,002	30,963	30,117

Table 8

SUPPORT DIVISIONS CAPITAL EXPENDITURE

			05/06	06/07	07/08	08/09
			£000's	£000's	£000's	£000's
			Budget	Plan	Plan	Plan
BASES						
BI	Buildings	Replacement Field Huts	-	20.00	-	-
		Redevelopment Project	300.00	33.30	-	-
	ITC	Replacement IT System	20.00	-	-	-
ROTHERA		Redevelopment Project	1,500.00	1,920.00	180.00	-
	Vehicles	Tractor Replacement	-	25.00	-	-
	Vehicles	Snowmobiles Replacements	-	72.00	-	75.00
	Vehicles	Gator ATV replacements	-	28.00	28.00	28.00
	Vehicles	JCB 435 Replacement	-	125.00	-	-
	Vehicles	Overaasen Snowblower Rep	-	95.00	-	-
	Vehicles	Telehandler Replacement	-	-	65.00	-
	Vehicles	Nodwell 60 Crane Replacement	-	-	135.00	-
	Vehicles	Teletruc Replacement	-	-	30.00	-
	Vehicles	Marston Trailer Replacement	-	-	14.00	14.00
	ICT	Replacement backup/data storage	-	-	50.00	-
HALLEY	Buildings	Fuel Flubber Replacement (STI)	-	55.00	-	-
	Vehicles	Snocat Replacement	-	95.00	-	105.00
	Vehicles	Nodwell 110C Repl Crane	180.00	-	-	-
	Vehicles	Bulldozer Replacement	140.00	140.00	140.00	-
	Vehicles	Snowmobiles Replacements	-	24.00	-	50.00
	Vehicles	Honda ATV Replacement	-	14.00	-	-
	Vehicles	Cargo Sledge Replacement	-	-	48.00	96.00
ES	ICT	Replacement backup/data storage	-	-	35.00	-
	MAE	HRPT Receivers	65.00	-	-	-
JCR	ICT	Replacement backup/data storage	-	70.00	-	-
	MAE	Midship Gantry overhaul	350.00	-	-	-
	MAE	HRPT Receivers	65.00	-	-	-
GENERAL	ICT	File Server Replacement	10.00	15.00	15.00	15.00
	ICT	File and Data Disk Storage	55.00	55.00	55.00	55.00
	ICT	Backup System Upgrade	-	25.00	25.00	25.00
	ICT	Replacement Oracle Server	-	-	20.00	-
	ICT	LAN VolP Cambridge Upgrade	-	-	50.00	-
	Vehicles	Mini digger/loader Sky-Blu	-	-	-	30.00
	Vehicles	Pedestrian snowblower Sky-Blu	-	-	-	40.00
	ICT	CODIS end	50.00	-	-	-
		RASOR Project	254.00	76.00	-	-
		Linux Cluster	246.00	-	-	-
	MAE	HRPT Receivers Halley	120.00	120.00	-	-
	Medical	Renewal of obsolete medical equipment	27.00	27.00	-	-
	ICT	Computer room upgrade	140.00	-	-	-
	EID	Air conditioning in archives storerooms	57.00	-	-	-
CAPITAL EXPENDITURE			3,579.00	3,034.30	890.00	533.00
PLUS HALLEY 6			4,390.00	6,840.00	9,850.00	2,460.00
GRAND TOTAL			7,969.00	9,874.30	10,740.00	2,993.00

Table 9

ALD MAJOR PROJECTS

			05/06	06/07	07/08	08/09
			£000's	£000's	£000's	£000's
			Budget	Plan	Plan	Plan
LOCATIONS						
ROTHERA	ICT	LAN upgrade & replacement	-	130.00	-	-
	ICT	Field Transceivers Repl	22.00	44.00	44.00	44.00
	ICT	Antenna Replacements	15.00	30.00	15.00	15.00
	Vehicles	Runway Maintenance	40.00	-	-	-
		Rebuild Container Handler	-	-	35.00	-
	Buildings	Runway Lights replacement	80.00	-	-	-
		Upgrade Fire Alarm System	-	-	24.00	25.00
SIGNY	Buildings	Slipway	-	150.00	-	-
BI	Buildings	Stand by fire pump	-	25.00	-	-
AIR						
DASH 7		Main Nav System Replacement	-	75.00	-	-
TWIN OTTERS						
		Gyro Replacement	65.00	45.00	-	-
		Main Nav System Replacement	-	75.00	75.00	-
		Rothera Ground Power Unit Replace	-	30.00	-	-
		HF Radio Replacement	-	30.00	30.00	30.00
SHIPS						
JCR	MAE	Upgrade Winches	-	20.00	120.00	-
	MAE	Replace Effer Cranes	-	-	120.00	120.00
	MAE	Replace Electrical Control System	20.00	430.00	-	-
	MAE	Voyage Logger	-	-	65.00	-
	MAE	Bridge Replacements	-	-	125.00	125.00
	MAE	Air Handling Units Replacement	35.00	30.00	-	-
	MAE	LTFW Coolers Replacement	-	-	200.00	-
	MAE	Main Engine Piston Replacements	55.00	-	-	-
	MAE	Thruster Overhaul	-	-	-	120.00
	MAE	STCM Replacement	-	-	10.00	10.00
	MAE	CTD Replacement	70.00	90.00	90.00	90.00
	MAE	GPS Replacement	10.00	15.00	15.00	15.00
	MAE	ADCP Replacement	110.00	-	-	-
	MAE	Furuna Sonar Replacement	-	-	120.00	-
	MAE	XBT Replacement	5.00	-	-	-
	MAE	Autosal Replacement	30.00	-	-	-
	MAE	Towed Proton Magnetometer	-	-	-	30.00
	ICT	Satcomm Replacement	-	-	30.00	-
	MAE	SVP replacement	-	15.00	15.00	-
ES	MAE	Voyage Logger	-	-	65.00	-
	MAE	Bridge and DP upgrade	-	30.00	-	-
	MAE	Mitsubishi Engine Replacement	-	200.00	200.00	-
	MAE	STCM Replacement	-	-	6.00	6.00
ALD MAJOR PROJECT EXPENDITURE			557.00	1,464.00	1,404.00	630.00

Table 10A

SCIENCE DIVISIONS CAPITAL ITEMS

Division	Project	Description	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan	
BIO	PEP-B	Lab equipment to support marine geochemistry	25.00	-	-	-	
	LTMS-B	Bio-Rad CHEF PFGE system	15.00	-	-	-	
	LTMS-B	Continuous Plankton Recorder	-	40.00	-	-	
	LTMS-B	CTD replacement - Rothera	-	-	25.00	-	
	PEP-B	UWITEC coring platform	8.00	-	-	-	
	BIOREACH	Real time PCR machine	32.00	-	-	-	
	BIOREACH	-80°C freezers (Roslin)	-	12.00	12.00	-	
	TOTAL BIO			80.00	52.00	37.00	-
GEO	ISODYN	Set of GPS receivers for Twin Otter	20.00	-	-	-	
	ISODYN	1 binocular stereozoom micro-palaeontological micro with digital camera	10.00	-	-	-	
	ISODYN	1 Transtec IDE Raid Disk Array (16 Disks)	8.60	-	8.60	-	
	ISODYN	1 Workstation etc	7.20	10.00	-	-	
TOTAL GEO			45.80	10.00	8.60	-	
PHY	WARP	VLF Precipitation Monitors	18.00	-	7.00	-	
	HOLISTIC	Geoelectric field instruments	72.00	18.00	-	-	
	HOLISTIC	Ship-borne imager	-	36.00	42.00	-	
	TIGRIS	Core drill & ecm	20.00	-	-	-	
	LTMS-P	Spectrometer to replace Dobson at Z	-	-	-	60.00	
	LTMS-P	GPS Instruments	24.00	-	-	-	
	LTMS-P	Oceanography - instrument moorings	60.00	30.00	-	-	
	LTMS-P	MOMU SAOZ replacement at R	20.00	40.00	-	-	
	LTMS-P	MOMU Instrument Replacement prog	-	48.00	48.00	48.00	
	LTMS-P	MOMU AWS replacements	25.00	50.00	25.00	-	
	WFL-P	Chemistry Lab refurbishment	-	30.00	-	-	
	WFL-P	GPR (Radar) replacement	-	-	50.00	-	
	WFL-P	Replace all survey GPS stations	25.00	30.00	-	-	
	WFL-P	Data Servers	10.00	10.00	10.00	10.00	
	WFL-P	Instrument - refurbish AIRES	-	20.00	-	-	
	WFL-P	Instrument - Dynasonde replacement	-	-	80.00	-	
	WARP	Radiometer	105.00	25.00	-	-	
	CEFAC	Ozone primary standard to ensure ozone data quality	10.00	-	-	-	
	CEFAC	Suite of 10 surface O3 sensors ruggedised to operate stand-alone in Antarctica	20.00	-	30.00	-	
	CEFAC	2 autonomous blimps specially adapted for Antarctic use	30.00	25.00	-	-	
	CEFAC	Workstation and computing equipment for modeller	-	-	-	8.00	
	CEFAC	Custom-made inert chamber for conducting snow photochemistry experiments	10.00	-	-	-	
	FOCAS	Unmanned Airborne Vehicles	10.00	10.00	10.00	-	
	FOCAS	Beowulf computers	-	-	10.00	-	
	FOCAS	Cloud lidar	20.00	-	-	-	
	FOCAS	Ice nuclei counter	-	50.00	-	-	
	FOCAS	3 ice buoys	15.00	-	-	-	
	FOCAS	3 TOGA buoys	27.00	54.00	-	-	
	FOCAS	2 HOMER CTDs	-	40.00	-	-	
	FOCAS	2 moorings	-	80.00	-	-	
	ACCENT	Upgrade to BEOWULF cluster	-	-	20.00	10.00	
	TIGRIS	Ruggedised field PC	6.00	6.00	-	-	
	TIGRIS	AWS	-	8.00	-	-	
	TIGRIS	Seismic recorder	50.00	-	-	-	
	IMAGE	Workstation xxxGB RAM	19.00	-	35.00	-	
	IMAGE	Workstation 4GBRAM x4CPU	-	-	6.00	-	
	TOTAL PHY			596.00	610.00	373.00	136.00
	TOTAL SCIENCE CAPITAL ITEMS			721.80	672.00	418.60	136.00

Table 10B

SCIENCE DIVISIONS MAJOR PROJECTS

Division	Project	Description	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan
BIO	BIOREACH	Chroococciopsis sequencing	-	120.00	120.00	-
	CEMI	BCF Collaboration	-	27.00	55.00	55.00
	PEP-B	BAS-sponsored meeting on Antarctic PEP1 link	-	8.00	-	-
	TOTAL BIO		-	155.00	175.00	55.00
GEO	ISODYN	Bristol University Bench Fee for BAS climate modeller	-	7.00	14.00	7.00
	ISODYN	ISODYN International Meeting	-	-	-	10.00
	ISODYN	Contribution to helo hire for Ross Sea volcano work	20.00	-	-	-
	PEP-G	Hire of coring equipment - SOC RVS (12m)	30.00	-	20.00	-
	QWAD	Studentship at Durham [BCF]	-	8.75	17.50	17.50
	QWAD	Processing software	-	5.00	-	-
	QWAD	Sci Services (sediment analyses)	4.00	10.00	8.00	10.00
	QWAD	Sci Services (dating)	5.00	9.00	9.00	20.00
	QWAD	Cruise support	120.00	-	20.00	-
TOTAL GEO		179.00	39.75	88.50	64.50	
PHY	CEFAC	Joint costs for operating DOAS and consumables	5.00	15.00	-	-
	CEFAC	Joint costs for operating CIMS and consumables	25.00	45.00	-	-
	DRAM	Statistician [BCF collaboration]	27.00	55.00	55.00	27.00
	DRAM	Post- EPICA European collaboration (IPICS/EPICS)	-	-	-	45.00
	DRAM	EPICA – contribution to achieving bedrock	40.00	20.00	-	-
	FOCAS	10 sea mammal tags	30.00	-	-	-
	HOLISTIC	Visiting Scientists	3.00	3.00	3.00	-
	NCP	Visiting scientist programme - contribution from BCF [Formerly D-AFI]	-	25.00	25.00	25.00
	NCP	Visiting scientist programme	15.00	15.00	15.00	15.00
	TIGRIS	Explosives & detonators	20.00	-	-	-
	WARP	Visiting Scientists	5.00	5.00	5.00	1.00
FOCAS	Cloud Modeller	-	-	55.00	55.00	
TOTAL PHY		170.00	183.00	158.00	168.00	
TOTAL		349.00	377.75	421.50	287.50	

Table 11

SOUTH GEORGIA

	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan
EXPENDITURE				
Employees	375.74	364.91	386.10	374.91
T & S	27.62	34.50	23.00	34.50
Communications	50.00	28.00	22.62	22.62
Repairs, Maintenance & Running Costs	7.00	7.00	7.00	7.00
Ships, Fuel & Lubricants	76.00	76.00	76.00	76.00
Boats	22.50	-	-	-
Bought in Services	31.20	35.20	35.20	34.70
Science Ship Charter	50.00	250.00	50.00	250.00
Logistics	18.00	18.00	18.00	18.00
Stationery, Publications & Printing	2.30	2.30	2.30	2.30
Equipment & Consumables	50.00	50.00	49.00	49.00
Clothing	8.05	11.00	14.00	11.00
Provisions	25.00	25.00	25.00	25.00
Overheads	263.34	264.87	277.70	274.66
Total	1,006.75	1,166.78	985.92	1,179.69
INCOME				
GSGSSI	500.00	658.78	500.00	649.61
FCO	500.00	500.00	500.00	500.00
Museum	8.00	8.00	8.00	8.00
Personal Communications	15.50			
Total	1,023.50	1,166.78	1,008.00	1,157.61
NET DEFICIT (SURPLUS)	(16.75)	0.00	(22.08)	22.07
BALANCE B/F	16.75	-	0.00	(22.07)
BALANCE C/F	-	0.00	(22.07)	0.00
DOCTOR EXPENDITURE	126.77	131.84	137.11	142.59
DOCTOR INCOME	126.77	131.84	137.11	142.59
TOTAL	-	-	-	-
GRAND TOTAL EXP	1,133.52	1,298.62	1,123.03	1,322.28
GRAND TOTAL INCOME	896.74	1,034.95	870.89	1,015.02
POTENTIAL INCOME TO BAS				
Overhead	172.84	167.86	177.61	172.46
Ship Time	79.50	84.00	88.50	88.50
Cargo	6.00	6.00	6.00	6.00
BAS Ship Messing Costs	5.00	7.01	5.59	7.70
Total	263.34	264.87	277.70	274.66

Notes:

(1) The income from GSGSSI balances the budget to zero.

Table 12

ARCTIC STATION

	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan
EXPENDITURE				
Employees	45.82	47.65	49.56	51.54
Overhead	10.54	10.96	11.40	11.85
T & S	15.06	15.06	15.06	15.06
Communications	7.08	4.70	4.70	4.70
Electricity	6.75	6.75	6.75	6.75
Building Rents	55.22	55.22	55.22	55.22
Sea Freight	1.50	1.50	1.50	1.50
Equipment & Consumables	5.40	5.40	5.40	5.40
Annual H&S Seminar	1.75	1.75	1.75	1.75
Replacement of station boat	7.00	-	-	
Total	156.11	148.99	151.33	153.77
INCOME				
NERC - confirmed in allocation	125.00	125.00	125.00	125.00
NERC - assumed in allocation	30.61	23.99	26.33	28.77
Income for old boat	0.50			
Total	156.11	148.99	151.33	153.77
NET POSITION	0.00	(0.00)	0.00	0.00

POTENTIAL INCOME TO BAS				
Overhead (1)	10.54	10.96	11.40	11.85

Notes:

- (1) Overhead rate confirmed with NERC at 23%.
(2) The station lease ends 31 December 2007

Table 13

PORT LOCKROY

	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan
EXPENDITURE				
Employees	33.53	2.32		
T & S	7.30	1.40		
Communications	0.50			
Building Repairs & Maintenance	0.65			
Admin Services	0.40			
Logistics	0.60			
Provisions	1.50			
Publications & Printing	-			
Equipment & Consumables	2.00			
Clothing	3.00			
Merchandise	37.50			
Overheads	12.81	0.53		
Total	99.78	4.25	-	-
INCOME				
Sales	99.78	4.25	-	-
Total	99.78	4.25	-	-
NET DEFICIT (SURPLUS)	-	-	-	-
BALANCE B/F				
BALANCE C/F	-	-	-	-
POTENTIAL INCOME TO BAS				
Overhead	7.71	0.53		
Ship Time	5.10			
Total	12.81	0.53	-	-


Table 14

ANTARCTIC FUNDING INITIATIVE

	05/06 £000's Budget	06/07 £000's Plan	07/08 £000's Plan	08/09 £000's Plan
NERC AFI Funding	1,568	1,604	1,640	1,677
NERC Expenditure				
total Grant Offers Made:				
round 1 To BAS	18			
round 1 To HEI	62			
round 2 To BAS	62			
round 2 To HEI	31			
round 3 To BAS	40			
round 3 To HEI	100	10		
round 4 To BAS	148	126	41	
round 4 To HEI	181	167	25	
round 5 To BAS	56	55	28	
round 5 To HEI	315	293	276	82
round 6 To BAS	24	47	49	25
round 6 To HEI	311	315	271	74
total Grant Offers Predicted:				
round 7 To BAS		91	102	103
round 7 To HEI		221	247	250
round 8 To BAS			93	105
round 8 To HEI			226	253
round 9 To BAS				95
round 9 To HEI				231
Programme management costs	58	59	60	62
Swindon Office Administration	17	17	18	18
Cost of Studentships	39	62	105	129
CGS costs (recovered by BAS)	10	10	10	11
One-off' infrastructure costs (to BAS)		76		
Total AFI Costs	1,472	1,549	1,551	1,438
Net AFI Position	(96)	(55)	(89)	(239)

KEY:

 Existing commitments

 Forecast, based on analysis of existing awards and costs

Official Start of Award Round - ▼

NOTES:

Treasury deflator applied from 2003/04.

Management costs for the first 4 rounds were higher due to 2 years 'spin up' period.

Figures for AFI1-3 are based on actual Award profiles for BAS and on actual

Award totals, but profiled according to the Applications, for most HEI awards.

Figures for AFI-4 are based on actual award profiles for both BAS and HEI.

Figures for AFI-5 show correct totals and correct profile for BAS but profile for HEI is calculated using the average profile for AFI Rounds 1-4.

Figures for AFI-6 show correct totals and correct profile for BAS and HEI awards.

Figures beyond AFI-6 apportion the awards according to the historic average.

Table 15 Analysis of Total Exp 2005/06 by purpose & type

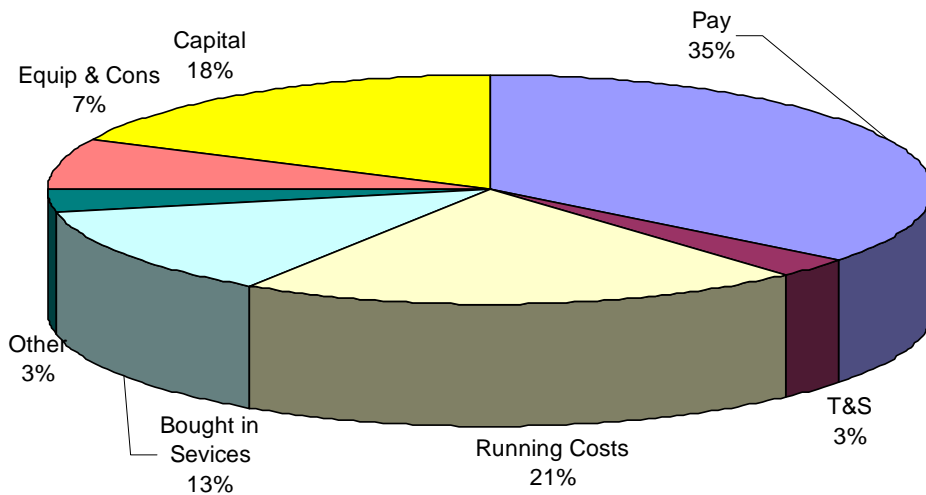
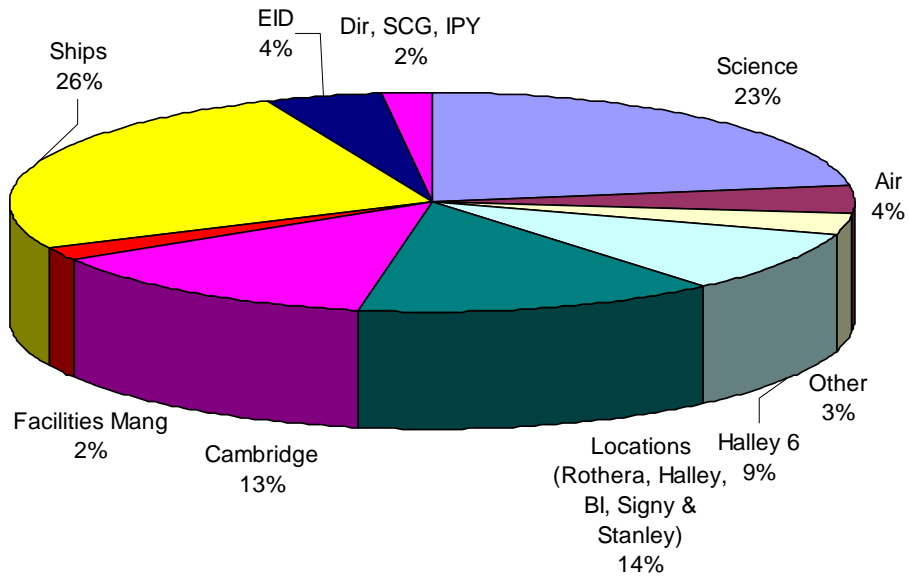


Table 16

PLANNING ASSUMPTIONS

1. BAS planning supports and is consistent with NERC's mission and strategic aims.

a. NERC Mission

- To promote and support, by any means, high quality basic, strategic and applied research, survey, long-term environmental monitoring and related postgraduate training in terrestrial, marine and freshwater biology and Earth, atmospheric, hydrological, oceanographic and polar sciences and Earth observations.
- To advance knowledge and technology, and to provide services and trained scientists and engineers, which meet the needs of users and beneficiaries (including the agricultural, construction, fishing, forestry, hydrocarbons, minerals, process, remote sensing, water and other industries), thereby contributing to the economic competitiveness of the United Kingdom, the effectiveness of public services and policy and the quality of life.
- To provide advice on, disseminate knowledge and promote public understanding of the fields aforesaid.

b. NERC Strategic Aims

- To identify science priorities for understanding the earth system and work with others to deliver world class science.
- To use NERC-funded science to underpin sustainable solutions.
- To provide effective leadership for the environmental sciences.
- To train and develop skilled individuals to meet national needs.
- To ensure that NERC is a flexible, fit-for-purpose organisation, and achieve excellence in service delivery and customer focus.

2. Planning is based on the defining characteristics of NERC Research Centres which are to provide, within NERC's mission and science strategy:

- Excellent scientific research, monitoring and survey not obtainable elsewhere within the UK at competitive quality, timeliness and cost.
- An integrated, well-managed national capability to provide reliable and independent advice to government and other interested organisations.
- A focus for international cooperation; for technology expensive projects; and for coordinating distributed major programmes solving complex scientific problems.

The term 'national capability' covers the development and maintenance of trained staff, enabling infrastructure, data gathering, and data curation, management and delivery.

3. **Costing principle.** Costings are to be realistic, based on approved requirements and levels of service. New requirements are not to be funded without appropriate prior approval. Pay inflation is handled centrally. Non-pay inflation is ignored after 05/06 except where there is knowledge of specific cost growth; Table 1 includes an unallocated allowance for new requirements and non-pay inflation.

4. **Staff Numbers.** The tables below set out the profiles of approved posts (Full Time Equivalents) in BAS over the period of the Plan, excluding casuals. The numbers represent the control totals for planning purposes; Personnel have revalidated all the figures and have a system to track any changes to approved numbers during FY. Costings in the financial tables reflect actual, and they assume that a proportion of pay settlement awards will be met centrally from NERC funds. The financial figures have been abated to take account of average 2% vacancy rates. Casuals to fill gapped posts are to be financed by Divisions and the reason is to be cited if this causes a budget overspend.

Division	Projected Number of Approved Posts (BAS Funded)			
	2005/06	2006/07	2007/08	2008/09
Directorate	(1) 17.25	16.75	16.50	16.50
ALD	250.23	250.23	250.23	250.23
BSD	(2) 62.30	59.65	59.95	59.95
EID	25.00	24.00	24.00	24.00
GSD	(3) 26.75	28.50	30.00	29.50
PSD	(4) 83.30	90.90	89.00	90.15
Totals	464.83	470.03	469.68	470.33

- (1) Includes Science Coordination Group
- (2) Includes 1.45 transitional funding
- (3) Includes 0.40 transitional funding
- (4) Includes 0.75 transitional funding

Division	Externally Funded Posts			
	2005/06	2006/07	2007/08	2008/09
Directorate	0.75	0.75	-	-
IPT Office	3.00	3.00	3.00	3.00
ALD	16.75	16.75	16.75	16.75
BSD	2.85	1.80	0.80	0.10
EID	2.00	2.00	2.00	2.00
GSD	1.25	0.75	-	-
PSD	4.25	2.00	0.50	-
Totals	30.85	27.05	23.05	21.85

5. **Science.** Costings reflect the approved programmes, long term monitoring and survey and well found laboratory support for delivering Global Science in the Antarctic Context. The eight key programmes are:

- Antarctic Climate and the Earth System (ACES)
- Biodiversity, Function, Limits and Adaptation from Molecules to Ecosystems (BIOFLAME)
- Climate and Chemistry: forcings, feedbacks and phasings in the Earth System (CACHE)
- Natural Complexity (NCP)
- Discovery 2010: integrating Southern Ocean ecosystems into the Earth System
- Greenhouse to ice-house: Evolution of the Antarctic Cryosphere and Palaeoenvironment (GEACEP)
- Glacial Retreat in Antarctica and Deglaciation of the Earth System (GRADES)
- Sun Earth Connections Programme (SEC)

6. **Cambridge Facilities.** Maintenance (and associated expenditure) has been costed on the long term assumption that the BAS Cambridge site will be maintained in accordance with NERC Estate Management standards, the recommendations of periodic condition surveys and in conformity with existing and anticipated safety, fire and security regulations. Most services are provided through a single facilities management contract.

7. **Research Stations (Less Halley).** Support for Bird Island, King Edward Point (KEP), Rothera and Signy is to be planned on the assumption of a long term presence. The KEP station is governed by the MOU with the FCO and GSGSSI. Capital expenditure plans are included in Table 3. Expenditure on field stations, such as Sky Blu and Fossil Bluff is planned on a year-to-year basis; these facilities are managed by Rothera.

8. **Halley.** Planning assumes that Halley VI will be constructed and Halley V removed by 2010. The outline timetable is:

2005/06	Prepare site for Halley VI
2006/07	Construct Halley VI
2007/08	Construct Halley VI
2008/09	Halley VI starts operations
2009/10	Remove Halley V

Maintenance expenditure on Halley V is to be progressively reduced in line with the closure timetable.

9. **Ships.** Expenditure plans for the Survey's ships are based on maintenance in class with the respective Classifications Societies (Lloyds Register and DNV). Maintenance and refit assumes an annual average of 330 operational days for each ship and no requirement for mid-life updates.

- RRS *James Clark Ross* – an operational life until 2020, with about a 160 days/year in the Antarctic. NERC funds and uses the ship for 60 days/year.

- RRS *Ernest Shackleton* – hire from the owners, Rieber's, until at least 2014 with a possible extension to 2019, with about 130 days/year in the Antarctic. BAS has an option in 2010 to consider the future of the North Sea charter arrangement, which provides an annual income to the Survey.

10. **Aircraft.** Plans for the maintenance of the Survey's aircraft are in accordance with the schedules laid down by Director Civil Aviation Falkland Islands and to the standards required for a Private Operator's Category Certificate of Airworthiness. The operational life of the aircraft is assumed to be:

- Twin Otters until 2015, with an overall total of 1660 hrs/yr for field operations per season.
- DHC-7 until 2015, at an average of 450 hrs/yr for field operations.

11. **KEP.** Funding of KEP is through an MOU with the FCO and GSGSSI and is ring-fenced. Core science money is not to be used to fund the project. The BAS presence is assumed to be long term.

12. **Vehicles.** Expenditure plans are based on maintaining a vehicle fleet to meet the needs of the approved field programme and specific base requirements.

13. **Health and Safety.** General infrastructure and project expenditure plans take into account the health and safety of the Survey's staff and known and anticipated UK and EU legislation, qualified only by the practicalities of implementation in Antarctica.

14. **Environment and Waste Management.** Capital and recurrent expenditure plans are based on the UK's obligations under the 1991 Protocol on Environmental Protection to the Antarctic Treaty and 1994 Antarctic Act (conditions attaching to permits issued by FCO).

15. **Information and Technology Support.** Plans are based on the requirements of approved projects, scientific cruises, the maintenance and support of the Antarctic and ship-based networks and Cambridge computing.

16. **ITSS Support.** Expenditure plans reflect the pricing structure set out in Service Level Agreement with ITSS.

17. **HMS ENDURANCE.** Plans take account of projects agreed annually with the Royal Navy over the ship's Five Year Programme and formalised as the MoD Ice Patrol Ship.

18. **Port Lockroy.** The operation of the Antarctic Heritage site at Port Lockroy is due to be transferred to the UK Antarctic Heritage Trust by the end of the 06/07 season.

PRICING GUIDANCE – 2005/06

1. General Principles

1.1 This Table provides the pricing rate that should normally be applied when preparing costings for science bids, collaborations or the provision of support to publicly funded scientific organisations.

1.2 Whilst the figures in the Table should cover the majority of circumstances, pricing arrangements vary depending on the circumstances. For example, for commercial work the price should not be less than the marginal cost plus 25%, but it could be much higher if the market permits. On the other hand, rates may be reduced or waived for projects or collaborations that produce benefits to the BAS Core Programme. Sponsors should seek advice at an early stage from the BAS Programme Office, Head of ALD or Head of Finance if they are uncertain about the pricing regime that should apply.

1.3 Special consideration will be needed when a nation wishes to use BAS facilities for science that is not part of a collaborative project with BAS. Each case will be considered on its merits, and 3 categories of charges normally apply to such foreign projects.

- a. **Full Economic Cost (FEC)**, when a project produces science with no direct benefits to BAS.
- b. **Half the FEC rate**, when a project will produce significant scientific benefit to BAS.
- c. **No Exchange of Funds**. This arrangement applies when there is a quid pro quo, and BAS has had or will receive similar or equivalent support from the nation concerned. Arrangements under this category will be considered by the Directorate on a case-by-case basis.

A. STAFF COSTS - DAILY 2005/06

Band	Grade	Salary £	NI £	Super £	Salary Related i.e. Salary & NI & Super £	Proposed EC Rate: Salary + 125% £	NERC Rate: Salary & NI & Super + 46% £	UK Full Economic Cost £
3	Grade 6	232	19	49	300	522	438	675
4	Grade 7	195	16	42	252	439	368	568
5	SSO SEO SPTO	150	12	32	194	338	284	437
6	HSO HEO HPTO	118	9	25	152	264	222	342
7	SO EO PTO	92	7	20	119	207	173	267
8	ASO AO	66	5	14	86	149	125	193
9	AA	69	6	15	90	156	131	202

STAFF COSTS - ANNUAL 2005/06

Band	Grade	Salary £	NI £	Super £	Salary Related i.e. Salary & NI & Super £	Proposed EC Rate: Salary + 125% £	NERC Rate: Salary & NI & Super + 46% £	UK Full Economic Cost £
3	Grade 6	51,025	4,082	10,868	65,975	114,806	96,324	148,445
4	Grade 7	42,943	3,435	9,147	55,525	96,621	81,066	124,931
5	SSO SEO SPTO	33,074	2,646	7,045	42,765	74,417	62,437	96,221
6	HSO HEO HPTO	25,853	2,068	5,507	33,428	58,170	48,805	75,213
7	SO EO PTO	20,213	1,617	4,305	26,136	45,479	38,158	58,805
8	ASO AO	14,563	1,165	3,102	18,830	32,766	27,491	42,367
9	AA	15,284	1,223	3,256	19,762	34,389	28,853	44,465

Notes:

Unless special arrangements apply overheads are to be charged in accordance with the appropriate column in the above table. The NERC rate will normally be applied to Public Sector customers. All overheads are to be paid into BAS central funds.

Where overheads have been won individuals may submit bids, through their HoD to the Director, for up to 50% of these funds for activities or further research bids that will enhance Survey science or support. Bids will be judged on their merits and the BAS overall financial position.

This will not apply in 2005/06.

Bids that seek to restore changes and/or reductions made in the budget allocation process or in the award of externally funded work will not normally be approved.

If you need Antarctic Full Economic Cost figures please contact BAS Finance.

Details:

Working days 220 per year

The pension rate has increased from 10.1% to 21.3% from 2005/06

B. FIELD AND LOGISTICS COSTS

	Standard BAS Rates	
	£	£
TRAINING/PREPARATION (COURSE)		
Specialist Safety training	500	
Survival training	100	
Medical	100	
SHIPCOSTS (DAILY)		
Scientific use of ship		
Charter JCR	14,000	
Charter ES (not incl fuel/other variable costs)	7,300	
Berth on ship		
JCR	76	
ES	53	
Messing on Ship for JCR & ES	11	
BASECOSTS (DAILY)		
Per person - messing		
Rothera	21	
Halley	43	
Bird Island	53	
Signy	86	
Per person - scientific		
Rothera	64	
Halley	86	
Bird Island	118	
Signy	236	
Cost of camping in field	236	
Cost of small boat support	172	
AIRCRAFT		
return flight (actual commercial)	2,100	
Cost of a twin otter hour	943	
Cost of a Dash 7 hour	3,065	
per passenger:		
D7 per hour		215
TO per hour		160
CLOTHING	summer	winter
short visit	559	n/a
offshore JCR	608	n/a
offshore ES	763	n/a
Halley station	1,002	1,495
Halley field	1,390	1,548
Rothera station	827	1,613
Rothera field	1,030	1,623
Bird Island/Signy/South Georgia	901	1,115
NB clothing remains property of BAS		

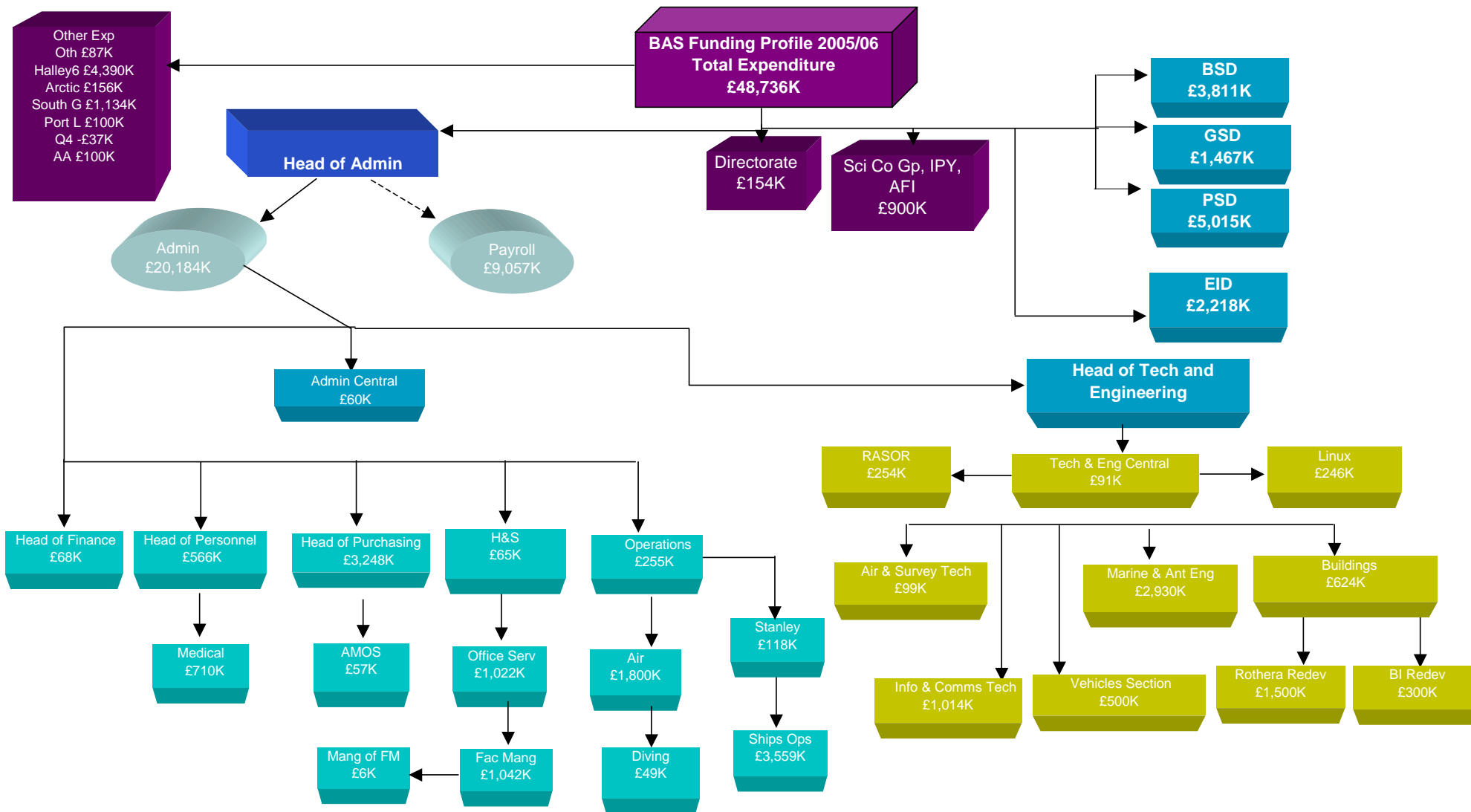
Table 18

BAS CHANGE AND PERFORMANCE OBJECTIVES

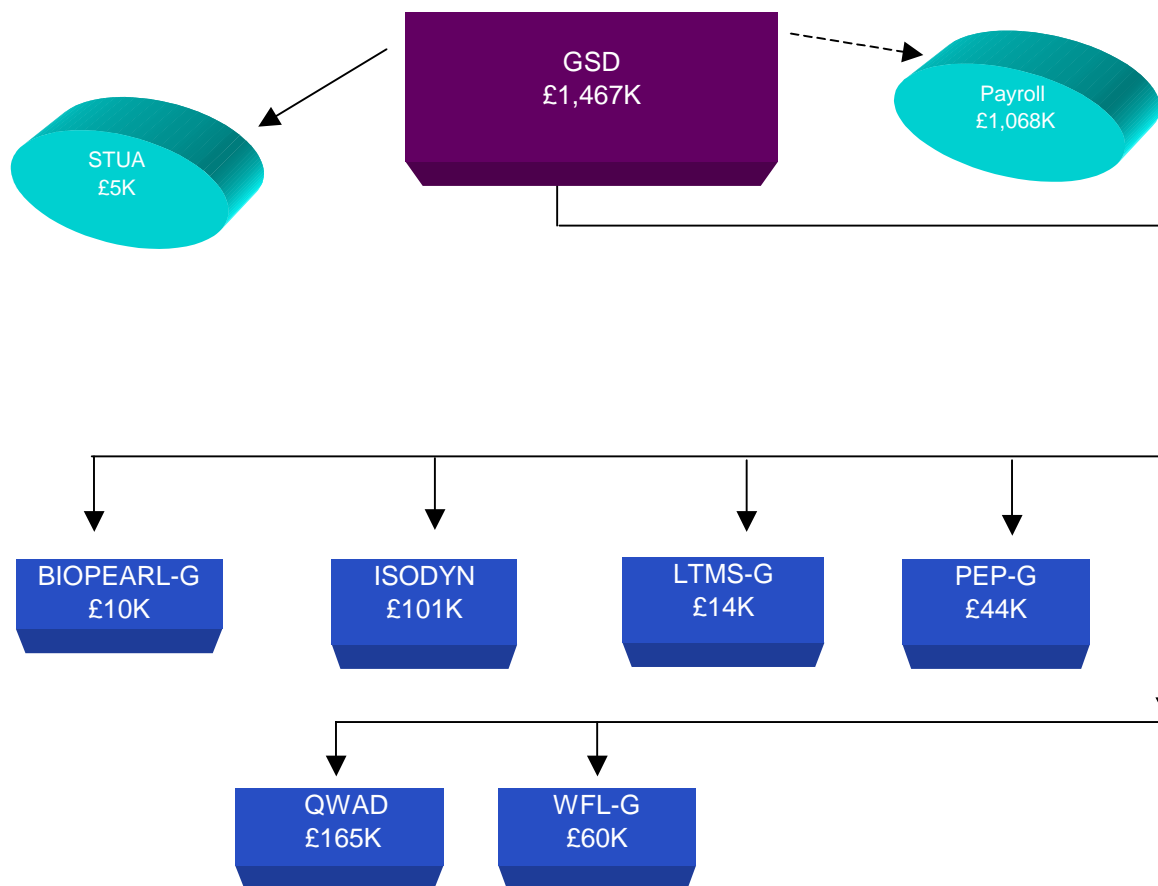
Serial	Change and Performance Objectives	Lead	Target Date		
			05/06	06/07	07/08
1. Delivering Science and its Support					
1.1	Deliver GSAC outputs to PIs	Sci HODs	Performance measured against annual plans		
1.2	Delivery of EID support to agreed plan	EID (dwhw)			
1.3	Delivery of LTMS to agreed plans	Sci HoDs			
1.4	Delivery of IMP plans	IMPs			
1.5	Delivery of CCAMLR projects	BSD (pgkr)			
1.6	Delivery of AFI support	AFI Co-ord (mm)			
1.7	Delivery of externally funded research projects	Sci HODs			
1.8	Implementation of approved capital projects	All HODs			
1.9	Implementation of approved operational plans	ALD (jhal)			
1.10	Meet research student criteria	GSD (jac)			
1.11	Maintain expenditure within budget guidelines	All HODs			
1.12	Complete ASGC reports and outputs	Hd Science Programmes		Dec06	
1.13	Deliver remainder of Q3 data and meta data to AEDC	Science HODs	Sep05		
2. Strategy & Planning					
2.1	Finalise the concepts of operation/management strategies for bases, ships and aircraft	ALD (jhal)	Dec05		
2.2	Sustainable energy strategy (initial implementation)	ALD (dmb) EID (jrs)	Mar06		
2.3	Embed BAS Information Strategies	EID (dwhw)	Mar06		
2.4	Complete Bird Island Redevelopment	ALD (jh)	May05		
2.5	Complete Rothera Redevelopment (1 st phase)	Project (jac)			May07
2.6	Achieve NERC Commercialisation Targets	ALD (jp)		Apr06	
2.7	Start Halley VI construction	ALD (kt)		Dec06	
2.8	Review planning and operation of airborne science	GSD (jac)	Jun05		
2.9	Make further progress with Vision Implementation	Directorate (cgr/jrd)	Dec05		
2.10	Decide New Requirements to be funded	Directorate – ALD (jrd/JP)	Dec05		

3. Process Improvements					
3.1	BAS Web Review	EID (dwhw)	Jan06		
3.2	Codify relationship with SPRI	SCG (asr)	Sep05		
3.3	Agree mandate for alien species project	BSD (pgkr)	May05		
3.4	Provide update on lab management	Sci HODs	Nov05		
3.5	Cambridge-led major incident exercise	ALD (jh)	Oct05		
3.6	Identify 'value' measures for studentships	GSD (jac)	Nov05		
3.7	Codify AFI processes with Swindon Office	SCG (asr)	Nov05		
3.8	Review budgetary policy for leave of absence, e.g. maternity leave	ALD (jp)	Sep05		
3.9	Review BAS Safety Management System	DD (jrd)	Jun05		
3.10	Review BI accommodation arrangements	ALD (jp)		Jun06	
3.11	Implement ERMS	EID (djh)	Sep05		
3.12	Post Implementation Review (PIR) - DISE	BSD (pgkr)	Aug05		
3.13	PIR – PASIN	ALD (dmb)	Nov05		
3.14	PIR – MASIN	PSD (mp)	TBC		
4. Improve Awareness of BAS					
4.1	Annual review of BAS photo and memorabilia archive	EID (dwhw)	May05		
4.2	Assess Artists and Writers Programme	EID (dwhw)	Jun05		
4.3	Complete brighter BAS image (bases, ships and at Cambridge)	EID (dwhw)	Mar06		
5. Human Resources					
5.1	Achieve liP reaccreditation	ALD (fcb)	Jun05		
5.2	Board update on Antarctic Employment Pool and wintering arrangements	ALD (fcb)	Jul05		
6. Mandatory, Regulatory and Proprietary Requirements					
6.1	Agree GSAC Antarctic permits with FCO	ALD (md)	Jul05		
6.2	Renewal of running contracts: a. Dash-7 maintenance b. Twin Otter maintenance c. Ships refit d. Cambridge Facilities Management	ALD (gnh) ALD (gnh) ALD (dmb) ALD (nw)		May06 May06	Jun07 Mar08
6.3	Maintain ISM and ISPs accreditation (annual audit)	ALD (cjh)	Mar05		
6.4	Review business continuity arrangements	ALD (jp)	Dec05		

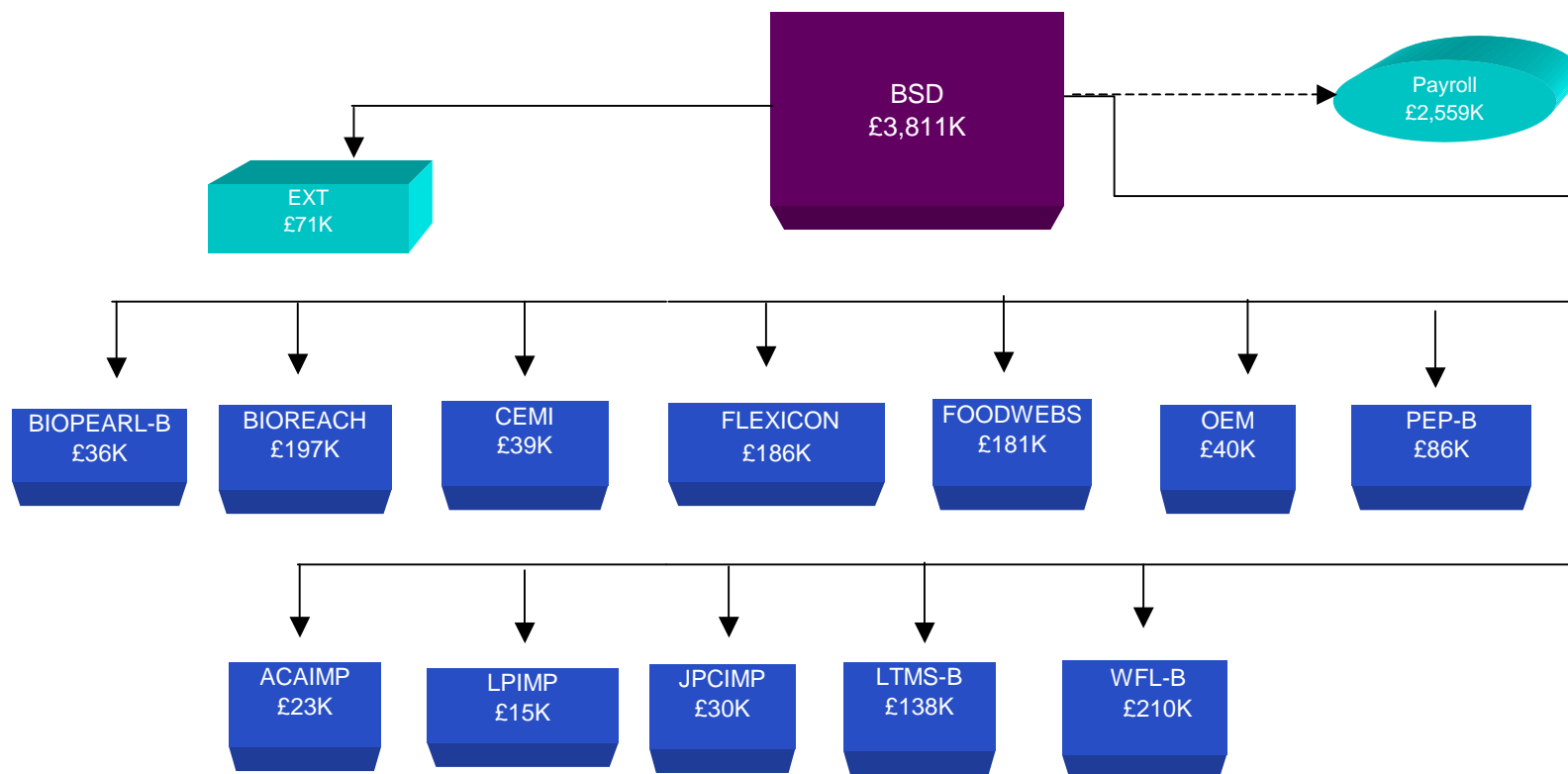
Appendix 1 Budget Delegation Flowchart – FY 2005/06 - ALD



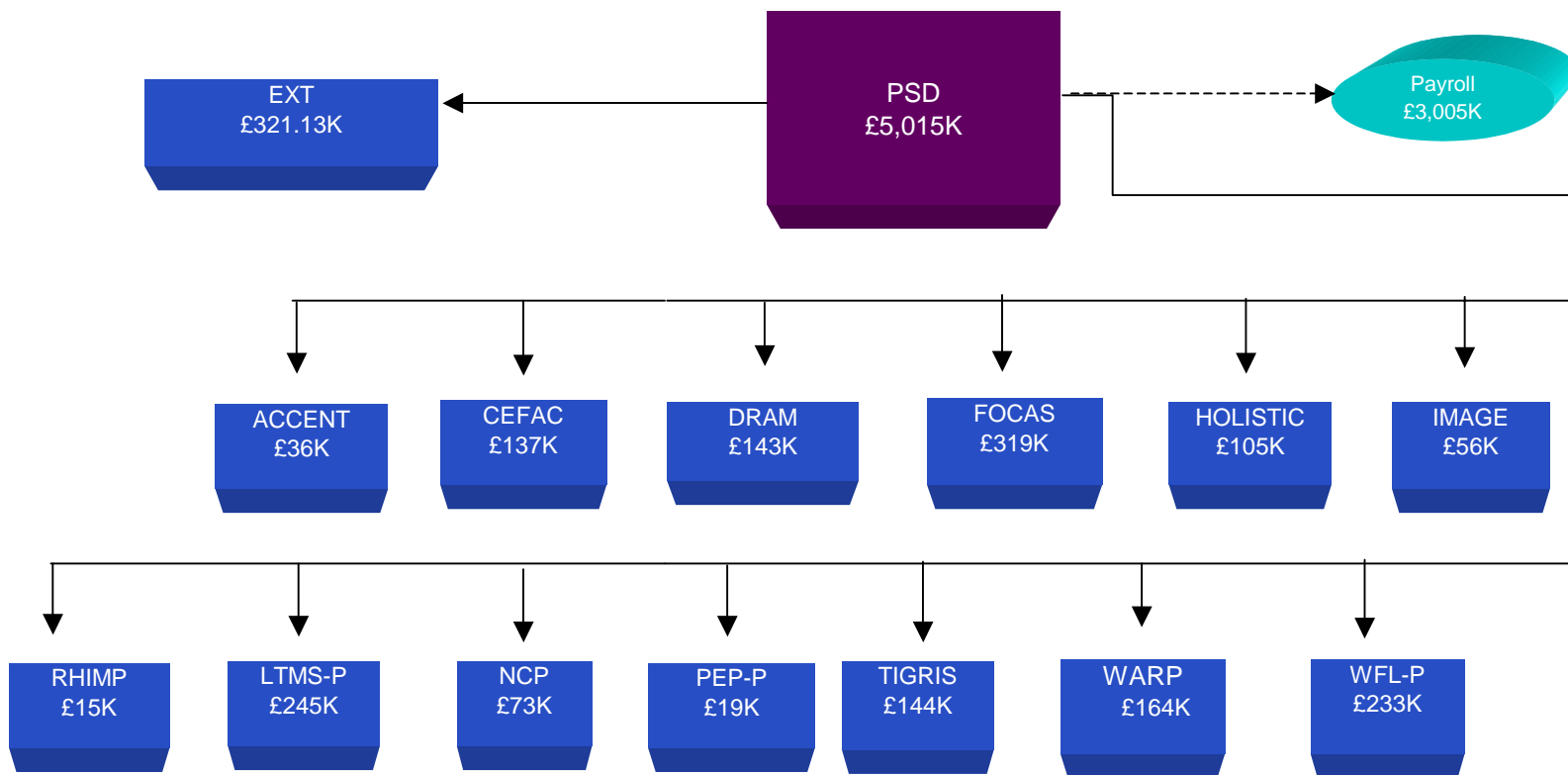
Appendix 2
Budget Delegation Flowchart – FY 2005/06 - GSD



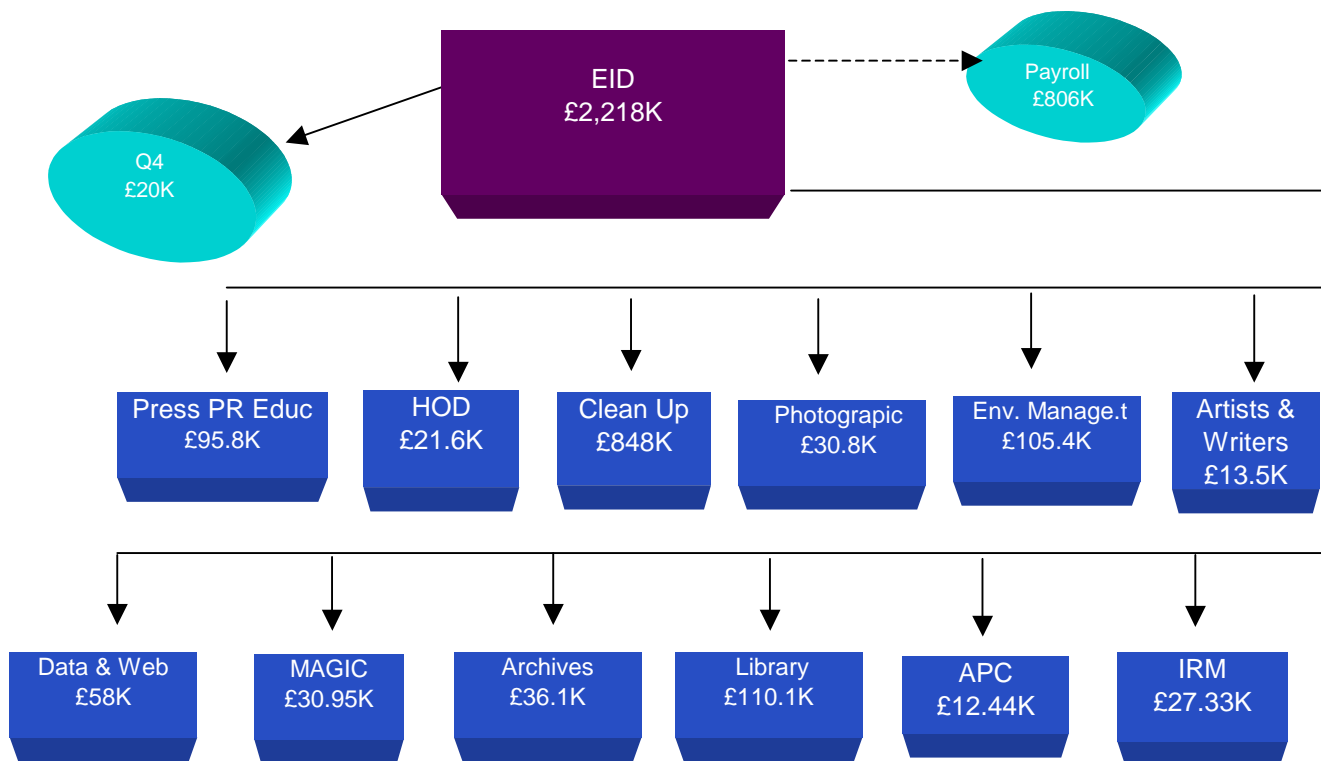
Appendix 3 Budget Delegation Flowchart – FY 2005/06 - BSD



Appendix 4 Budget Delegation Flowchart – FY 2005/06 - PSD



Appendix 5 Budget Delegation Flowchart – FY 2005/06 - EID



Appendix 6
BUSINESS PLAN DISTRIBUTION LIST

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Deputy Director
Directorate Assistant
Head of ALD
Head of BSD (26)
Head of EID (10)
Head of GSD (11)
Head of PSD (22)
Head of Science Programmes
Head of Science Coordination Group (3)
Individual Merit Promotees (4)
GSAC Principal Investigators (8)
Head of Finance (14)
Head of Operations (11)
Head of Personnel (4)
Head of Procurement & Shipping (9)
Head of Technical Services (6)
Safety Advisor & Head of Cambridge Facilities (3)
Head of ETS (3)
Head of Building Services (3)
Head of Marine Engineering (2)
Head of ITS (3)
IPMS/Whitley Chair
Library
Archives

BUSINESS PLAN DISTRIBUTION LIST cont

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Mrs M Hayward	Chief Accountant, NERC
Mr S Caswell	Management accountant, NERC
Ms L Porter	Planning and Communications Directorate, NERC
Mr J Hansford	Director of Swindon Office, NERC
Mr J Bates	Head of Personnel, NERC
Mr R Harris	Director of RCIAS, Swindon
Mr N Yeates	RCIAS, Swindon
Dr M Richardson	Foreign & Commonwealth Office, London (2)
Mr P Williams	Office of Science & technology, London (2)
Dr I Grant	BASMU, Plymouth (2)
Master	RRS James Clark Ross (3)
Master	RRS Ernest Shackleton (3)
Mrs P Sackett	Stanley Office, Falkland Islands
Halley Base	Antarctica
Rothera Base	Antarctica
Bird Island Base	Antarctica
Signy Base	Antarctica
King Edward Point Base	Antarctica
Dr B Smith	BAS Board Independent Member
Mr J Hammerton	Morrison
BAS Internal web pages	http://basweb.nerc-bas.ac.uk/busplan/

www.antarctica.ac.uk



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