

**Technical Advisor Services to the  
Antarctic Infrastructure Modernisation Programme (AIMP)  
Future Phases**

**Scope**

**Volume 2**

**ALL WORKS**

Document Reference: BAS/PM/TAP/002

Framework Agreement Reference: CON19006

BAS Ref: BAS/PMO/Proc01

## Version Control

| Revision | Status     | Amendments | Date of Issue |
|----------|------------|------------|---------------|
| 1.1      | For Tender | n/a        | 26/07/2019    |
|          |            |            |               |
|          |            |            |               |
|          |            |            |               |

## Document Approvals

|                  |   |                      |   |  |
|------------------|---|----------------------|---|--|
| <b>Revision:</b> | 1.1   | <b>Report Title:</b> | Technical Advisor - Scope, Volume 2, All Works. |  |
|                  | <b>Name</b>   | <b>Signature</b>     | <b>Date</b>                                     |  |
| <b>Prepared:</b> | David Seaton<br>BAS Senior Infrastructure<br>Programme Manager  |                      |   |  |
| <b>Checked:</b>  | Nicola Turner<br>Head of Procurement -<br>Construction & FM<br>UK Shared Business Services<br>Limited |                      |   |  |
| <b>Verified:</b> | John Eacott<br>NERC Head of Estates   |                      |   |  |

## Table of Contents

|  |           |
|--|-----------|
| <b>1. Specification and Description of Services – All Projects .....</b> | <b>4</b>  |
| 1.1. General Requirements for all Project Works                          | 4         |
| 1.2. Deliverables for all Task Orders at all work stages                 | 4         |
| 1.3. Presentation of Deliverables  | 7         |
| 1.4. Maintenance of Registers  | 9         |
| 1.5. BAS Reviews and Delivery Periods                                    | 9         |
| <b>2. Specific Requirements for Deliverables .....</b>                   | <b>10</b> |
| 2.1. Quality Plan  | 10        |
| 2.2. Project Programme   | 10        |
| 2.3. Project Initiation Meeting  | 10        |
| 2.4. Risk Assessment and Project Risk Register                           | 10        |
| 2.5. Configuration Control Register                                      | 11        |
| 2.6. Master Data and Assumptions List (MDAL)                             | 11        |
| 2.7. Early Warnings Register   | 11        |
| 2.8. Compensation Event Register   | 11        |
| 2.9. Request for Information (RFI) Registers                             | 12        |
| 2.10. Cost Plans   | 12        |
| 2.11. Meetings Generally   | 12        |
| 2.12. Framework Agreement Delivery Meetings                              | 12        |
| 2.13. Monthly Framework Agreement Progress Reports                       | 13        |
| 2.14. Quarterly Framework Agreement Performance meetings                 | 13        |
| 2.15. Monthly Project Progress Reports                                   | 13        |
| 2.16. Monthly Project Progress Meetings                                  | 14        |
| 2.17. Project Board Meetings   | 14        |
| 2.18. Peer Reviews   | 15        |
| 2.19. Performance Review and Measurement                                 | 15        |
| 2.20. COMPLIANCE WITH LEGISLATION  | 16        |
| 2.21. Critical Systems Analysis  | 17        |
| 2.22. BIM  | 18        |
| 2.23. Government Soft Landings   | 18        |
| 2.24. Sustainability Assessment  | 18        |
| 2.25. Surveys and Investigations   | 19        |
| 2.26. Business Cases   | 20        |
| <b>Annex A – BAS Health and Safety Policy .....</b>                      | <b>21</b> |
| <b>Annex B – Liabilities Memo .....</b>                                  | <b>33</b> |

## Specification and Description of Services – All Projects

### 1.1. General Requirements for all Project Works

The following provides details of the deliverables that the *Technical Advisor (TA)* shall provide for all projects, regardless of the work stage at which the project is initiated

The deliverables stated in this volume of the Scope are in addition to the specific requirements for individual work stages stipulated under Volumes 3 and 4. The *TA* shall also demonstrate the key attributes set out in Volume 1.

Specific information pertaining to the requirements for each individual project shall be included in the Task Order for the project.

### 1.2. Deliverables for all Task Orders at all work stages

The following presents a summary of deliverables that the *TA* shall be required to produce for all projects, unless specifically instructed otherwise under a Task Order. Similarly, the timescales proposed under the column 'Point of Delivery' may not be suitable for all projects. Therefore if required, and agreed with the *TA* and *Client* these timescales can be altered through the Task Order.

| Duties and Responsibilities   | Ref. | Deliverables                             | Point of Delivery  |
|---|------|--|--|
| Develop and maintain an ISO 9001 accredited Quality Assurance system. |      | Quality Assurance.                       | Ongoing throughout all projects.   |
| Develop and maintain a quality plan.                                  | 2.1  | Quality Plan                             | Issue within 4 weeks of issue of Task Order.<br><br>Updates as appropriate throughout the lifecycle of the project.  |
| Develop and maintain the Project Programme.                           | 2.2  | Project Programme                        | As per contract requirements.<br><br>Submit with Monthly Progress Reports.   |
| Project Initiation Meeting.   | 2.3  | Minutes of meeting                       | Within 10 working days of meeting of project start.  |
| Initial Risk Meeting.   | 2.4  | Minutes of meeting & draft Risk Register | Initial Risk Meeting to be held within one calendar month of date of agreed Task Order.<br><br>Produce preliminary draft of risk register a minimum of 5 working days prior to Initial Risk Meeting. |
| Develop and maintain a risk register using Risk and                   | 2.4  | Risk Register                            | Ongoing throughout all project work stages.  |

| <b>Duties and Responsibilities</b>   | <b>Ref.</b> | <b>Deliverables</b>               | <b>Point of Delivery</b>   |
|--|-------------|-----------------------------------|--|
| Opportunity Management Register (ROMR) template.                                   |             |                                   | Review for inclusion in Monthly Progress Reports as minimum.   |
| Develop and maintain Configuration Control Register.                               | 2.5         | Configuration Control Register    | Ongoing throughout all project work stages. Use BAS template.  |
| Develop and maintain Master Data and Assumptions Log (MDAL).                       | 2.6         | MDAL                              | Ongoing throughout all project work stages. Use BAS template.  |
| Develop and maintain Early Warnings Register.                                      | 2.7         | Early Warning Register            | Ongoing throughout all project work stages. Submit with Monthly Progress Reports.  |
| Develop and maintain Compensation Event Register.                                  | 2.8         | Compensation Event Register       | Ongoing throughout all project work stages.  |
| Request For Information Registers.   | 2.9         | RFI Register                      | Ongoing throughout all project work stages.  |
| Cost Plans and update periodically to capture design and risk development.         | 2.10        | Cost Plans (including updates)    | Updated Cost Plans as appropriate. Include in Monthly Progress Reports (see 2.13).   |
| Lessons Identified Log.  | Vol. 4      | Lessons Identified Log            | Ongoing throughout all project work stages. Submit as Annex to Project Completion Report.  |
| Project Completion Report.   | Vol. 4      | Project Completion Report         | Final approved version to be submitted 5 working days prior to Completion of Project.  |
| Cost Control and Reporting   | A3.iv       | Cost Report                       | Monthly to be incorporated in to the BAS/NERC reports.   |
| Meetings – generally.  | 2.11        | Agenda<br><br>Minutes of meetings | Issue a min of 3 working days in advance of the meeting date.<br><br>Minutes to be issued within 5 working days of meeting date. |
| Biannual or Quarterly Framework Agreement Delivery Meetings (Partnership Meeting). | 2.12        | Agenda and Minutes                | Every three or six months, typically 4 weeks after the Key Performance Indicator meeting.  |

| <b>Duties and Responsibilities</b>   | <b>Ref.</b> | <b>Deliverables</b>                         | <b>Point of Delivery</b>  |
|--|-------------|---|---|
| Monthly Framework Agreement Progress Reports.  | 2.13        | Framework Agreement Progress Report         | To be submitted around the 15 <sup>th</sup> of each calendar month (so the previous months invoices are reflected).   |
| Quarterly Framework Agreement Performance Meetings   | 2.14        | Agenda and Minutes                          | Every three months.<br>The KPI returns will form the agenda and minutes of this meeting.  |
| Monthly Project Progress Reports.  | 2.15        | Project Progress Report                     | To be submitted on final working day of each calendar month. Submit min. 3 working days ahead of Monthly Progress Meetings.   |
| Monthly Progress Meetings.   | 2.16        | Agenda and Minutes                          | Monthly (to be held at BAS Cambridge or via Skype)  |
| Attend Project Board Meetings.   | 2.17        | Review Project Board Minutes                | Quarterly (to be held at BAS Cambridge)   |
| Independent Peer Reviews.  | 2.18        | Peer Review Report                          | In conjunction with specific deliverables (Volumes 3 & 4).  |
| Co-operate with performance assessment (Key Performance Indicators).   | 2.19        | Minutes of Performance Assessment Meeting   | Performance assessment meetings to be co-ordinated with quarterly Framework Agreement Progress Meetings.  |
|  |             | Self-Assessment                             | Response to performance assessment findings.  |
| Compliance with UK Legislation (i.e. Health and Safety, Building Regulations, Design, Equality Act, Fire Safety etc.). | 2.20        | As required for compliance with Regulations | Ongoing throughout all project work stages.<br>Submissions at relevant junctures throughout project lifecycle to meet legislative requirements (see volumes 3 and 4 for specific deliverables). |
| Compliance with BAS Specific Policies.   | 2.21        | n/a   | Ongoing throughout all project work stages.   |
| Critical Systems Analysis (CSA).   | 2.22        | Critical Systems                            | As part of all design reports (see Volumes 3 & 4).  |

| Duties and Responsibilities  | Ref.         | Deliverables                         | Point of Delivery  |
|--|--------------|--------------------------------------|--|
|  |              | Analysis Report                      |  |
| Building Information Modelling (BIM).  | 2.23         | BIM Execution Plan                   | Within 1 month of project initiation.  |
|  |              | BIM Drops                            | As defined in individual project BIM Protocols.  |
| Government Soft Landings.  | 2.24         | Soft Landings Review Meetings        | As part of project design works. Ongoing throughout all project work stages.   |
| Sustainability compliance with AIMP Sustainability Strategy and requirements of BREEAM and CEEQUAL as appropriate. | 2.25         | Sustainability Management Plan       | Ongoing throughout all project work stages.<br><br>Submit reviews at formal reporting points identified under specific schemes (i.e. as defined in BREEAM or CEEQUAL). |
| Carry out all or any necessary surveys and investigations.   | 2.26         | Survey and investigation information | As required.   |
| Support the <i>Client</i> in the development of Business Cases.  | 2.27         | n/a                                  | At specific work stages.   |
| Production of Investment Appraisals to support Business Cases.   | 2.27 & Vol.3 | Investment Appraisals                | At specific work stages (see Volumes 3 & 4)  |

### 1.3. Presentation of Deliverables

All deliverables to the *Client* shall be co-ordinated by the *TA* and presented in a consistent manner as stipulated under the key attributes set out at Volume 1. Any works undertaken by sub-consultants shall be made through the *TA* and shall be reviewed by the *TA* prior to submission to the *Client*. All submissions by the *TA*'s sub-consultants shall have the same appearance as those made by the *TA* i.e. drawing title blocks shall be consistent and the appearance of documents must be consistent.

All deliverables shall include appropriate Quality Assurance markings i.e. shall demonstrate that the *TA*'s processes for checking and approval have been undertaken, including signatures.

Deliverables shall be presented in soft (electronic) copies and when specifically requested, in hard copies. For electronic submissions, the *TA* shall confirm with the Project Manager the format (and compatible version) prior to making the submission.

The *TA* shall develop drawings for presentation and use at A3, i.e. drawings are scaled to A3 rather than being A1 drawings reduced to fit A3.

All submissions shall be made to the Project Manager unless specifically instructed otherwise.



#### **1.4. Maintenance of Registers**

The items identified under Section 1.2 as “ongoing throughout all project work stages.” shall be maintained by the *TA* and kept up to date at all times. The *Client* may request copies of the [current] documentation at any point throughout the project, and the *TA* shall provide the current version within 5 working days.

#### **1.5. BAS Reviews and Delivery Periods**

All deliverables shall be submitted for review by the *Client* before a final version is issued and accepted. The *TA* shall allow for the following procedures and timelines for each submission;

- *TA* submits “Draft Final” version of document,
- *Client* review (including comments) – 10 working days,
- *Client* collates and reviews/filters comments received from *Client’s* end users,
- *Client* comments returned to *TA*,
- *TA* to respond to *Client* comments within 5 working days and
- Submission to be amended and “Final” version of document to be submitted within 10 working days after *TA* response to comments.

## Specific Requirements for Deliverables

### 1.6. Quality Plan

The Quality Plan shall relate the generic requirements of *TA*'s quality assurance processes to the specific quality requirements for the project and shall define;

- how the project requirements relating to quality are to be measured and attained,
- the specific allocation of responsibilities, authority and resources during the project and the specific documented procedures and instructions to be applied,
- suitable testing, inspection, examination, approvals and audit programmes at appropriate stages,
- a documented procedure for alterations and modifications to the Quality Plan as the project proceeds,
- the method for measuring the achievement of the Scope requirements and
- the method for ensuring, and demonstrating compliance with all relevant UK Legislation (see 2.21).

The *TA* shall also evaluate the quality plans of its sub-consultants to ensure compliance and compatibility with its own Quality Plan.

### 1.7. Project Programme

The Project Programme shall be developed in line with the contractual requirements for the Contract, but shall also include the following;

- estimated durations for the Construction Partners design and construction elements,
- [where applicable] key Antarctic operations dates (see Volume 1) including shipping deadlines, and
- [where applicable] identification of long lead in items and estimated procurement timescales.

### 1.8. Project Initiation Meeting

The Project Initiation Meeting is to be held within ten working days of the issue of a Task Order request. The principal aims of the Project Initiation Meeting are;

- introduction of key individuals for project delivery,
- identify the key drivers for the *Client*'s need for the project,
- identify key project requirements and objectives,
- understand communication channels,
- review existing information for completeness and suitability and identify any additional information which may be required from the *Client* and
- *TA* to outline their proposed methodology for project delivery.

The meeting shall be arranged (including production of the agenda) and chaired by the Project Manager. The *TA* Project Manager shall record and produce minutes of the meeting.

### 1.9. Risk Assessment and Project Risk Register

The *TA* shall, in conjunction with the *Client*, carry out risk analysis for each project and record the findings in the project risk register, using the ROMR risk template (this includes quantitative and qualitative assessments of time, cost and quality).

The *TA* shall maintain the risk register through to the point the project gets handed over to the Construction Partner, normally at the end of Work Stage 3b. The risk register shall be reviewed and updated as necessary, but as a minimum this shall be undertaken monthly and the current version included in the Monthly Progress Report (see Section 2.15).

Risk analysis shall be undertaken by the *TA* to determine three point estimates for financial risk allocation, in line with the requirements set out at Volume 3.

Designers Risk Assessments shall be undertaken in accordance with Health and Safety Legislation and the *TA* shall maintain his own internal risk registers in line with his Quality Assurance systems independently to the Project Risk Register.

#### **1.10. Configuration Control Register**

The *TA* shall operate a system of Configuration Control for each project. The Configuration Control Register shall;

- demonstrate and record evolution of the project during each work stage
- record any amendments to the project, and the reasons for the amendments and
- identify the person or persons responsible for initiating and authorising such amendments.

At financial completion of a project, the *TA* shall include the Configuration Control Register in the Project Completion Report to ensure that the evolution of the project is formally recorded.

#### **1.11. Master Data and Assumptions List (MDAL)**

The *TA* shall maintain a register of all data used and assumptions made in the development of a project. The BAS standard MDAL register shall be used and shall appropriately cross reference all entries to the Risk Register, Issues Log etc.

The *TA* shall maintain the MDAL on an ongoing basis and ensure that actions recorded within the MDAL are appropriately progressed and addressed.

#### **1.12. Early Warnings Register**

The *TA* shall maintain an Early Warning register throughout the Contract identifying when Early Warnings are raised, how and when they are communicated, who they are communicated to and any associated actions required.

The *TA* shall work at all stages to reduce the risk of occurrence of the issues identified within the Early Warnings to acceptable levels in order to provide value for money and cost certainty for the *Client*.

From work stage 4b onwards Early Warnings will be managed by the Project Manager using the ROMR with support from the *TA*.

#### **1.13. Compensation Event Register**

The *TA* shall adhere to the process for Compensation Events as set out in the Contract, and shall maintain a Compensation Event register of all Compensation Events under the Contract. This shall be issued as part of the Monthly Progress Report.

From work stage 4 onwards the Compensation Event Register for Compensation Events associated with the Construction Partner's Contract will be managed by the Construction Partner and will be subject to review by the *TA*.

#### 1.14. Request for Information (RFI) Registers

The *TA* shall establish and maintain a RFI register which captures all RFIs raised on the project, both by the *TA* and for later work stages, by the Construction Partner, up until the end of work stage 4b. After this stage the register will be maintained by the Construction Partner.

The RFI register shall record details of when RFIs are raised, actions required, owners etc. A summary of active RFIs shall be included as part of the Monthly Progress Reports.

#### 1.15. Cost Plans

The *TA* shall develop cost plans for each project, and these shall be developed and maintained from project initiation and shall be reviewed and refined throughout the lifecycle of a project.

The level of detail provided for each cost plan shall be commensurate to the progress and development of the project, noting that at every stage, the level of detail incorporated in the Cost Plan must be sufficient to support the development of Investment Appraisals and therefore align with the requirements of HM Treasury Green Book (see Volume 3).

For work stages 0-2, Cost Plans shall be produced for each individual project and shall include analyses of all options considered with sufficient supporting information to be able to quantify that the recommended option provides the best value for money solution. **See also Section 2.24 (Sustainability) and the requirement for carbon assessments to be included in the options appraisal process.**

The cost plans must also appropriately measure and record the levels of uncertainty through the use of three point estimates etc. in line with the requirements of HM Treasury Green Book.

The specific cost breakdown structure shall be agreed between the *TA* and the Project Manager to meet the individual project requirements.

#### 1.16. Meetings Generally

All project meetings shall be chaired by the Project Manager, unless specifically stated otherwise.

The *TA* shall be required to produce agenda and minutes for all meetings attended. These shall be submitted within the timeframes below unless specifically stated otherwise;

- Agenda - a minimum of 3 working days prior to the meeting and
- Minutes – a maximum of 5 working days following the meeting.

The *TA* shall allow in his pricing for a minimum of 1 No. “other” meeting to be held every month; this being in addition to the specific meetings detailed elsewhere in the Scope.

The *TA* shall allow for half of meetings to be held at BAS Cambridge and the other half to be via Skype.

#### 1.17. Framework Agreement Delivery Meetings

Every 3 or 6 months, the *TA* Framework Director and *TA* Framework Manager shall be required to attend a meeting with the AIMP Programme Director and the Service Manager in order to discuss overarching issues relating to the Framework Agreement delivery, *TA* and *Client* performance, and any specific project issues which have arisen during the reporting period and have not been adequately addressed at Project Manager level.

The *TA* shall submit an agenda and any supporting information, as well as taking and issuing minutes of the meeting. These meetings shall be co-ordinated with the Quarterly Framework Agreement Performance meetings (see Section 2.14).

### **1.18. Monthly Framework Agreement Progress Reports**

The *TA* shall be required to provide a monthly progress report to provide a summary of the progress of the Framework Agreement as a whole (this is in addition to the Monthly Progress Reports for each individual project)

The Framework Agreement Progress Report shall record;

- all projects currently instructed as Task Orders, including spend against total budget (including risk), and progress against key project dates,
- all Task Orders which have been issued but not yet contracted and
- all completed Task Orders including actual spend and performance against programme.

The BAS standard template shall be used by the *TA* and submitted by the *TA* Framework Manager to the AIMP Programme Director.

Whilst a formal meeting shall not be required to accompany the Framework Agreement Progress Report, the *TA* shall allow for a monthly teleconference with the AIMP Programme Director to discuss progress, and shall be required to attend formal Framework Agreement Progress Meetings every 3 months (see Section 2.14).

### **1.19. Quarterly Framework Agreement Performance meetings**

Quarterly, the *TA's* Framework Manager shall be required to attend a meeting with the Service Manager to discuss performance generally of Framework Agreement delivery, and any specific project issues which have arisen during the reporting period.

The *TA* shall submit an agenda and any supporting information, as well as taking and issuing minutes of the meeting. The meeting shall be chaired by the Service Manager. See also 2.20.

### **1.20. Monthly Project Progress Reports**

A progress report shall be provided for each individual project (task order) on a monthly basis by the *TA's* Project Manager and submitted to the Project Manager on dates to be agreed with the Project Manager.

All monthly project progress reports up until the end of work stage 3 shall include the following information;

- an executive summary,
- summary of all works to date,
- summary of works progress within reporting period,
- programme, including;
  - progress against programme, including a summary against key milestones
  - impact of agreed Compensation Events on the contract programme,
  - impact of Compensation Events to be agreed, on the Contract Programme and
  - potential impact of early warnings on the Contract Programme,
- list of meetings held within reporting period,
- summary of any RFIs,
- summary of any updates to configuration control register
- summary of any updates to Stakeholder and Communications management plan,
- project financial cost plan summary, including;
  - expenditure to date,
  - forecast expenditure,

- value of Compensation Events agreed and outstanding,
  - estimated value of Early Warnings,
  - value of risk and spend against this, and
  - latest best estimate of overall project out turn cost
- Risk, including;
  - current risk register and
  - a summary of the current most significant risks to the project,
- Early Warnings, including;
  - a summary of the early warnings which are current and proposed actions to mitigate occurrence and
  - a summary of any early warnings that were identified in previous reports identifying if they are now closed, the course of action that led to them being closed.
- Health and Safety, including;
  - progress of the relevant documentation for compliance with CDM Regulations,
  - identification of any key health and safety risks and proposed mitigation actions,
  - any notifiable accidents or incidents.
- Sustainability, including;
  - progress against objectives in project sustainability management plan
- Benefits, including;
  - progress against objectives in project benefits realisation plan

Monthly progress reports for work stages 4, 5 and 6 only require to report on the *TA* task order and not the overall project, which is covered by the Construction Partner monthly progress reporting.

Monthly Progress Reports are not required beyond completion of Work Stage 6 (i.e. not required during defects period).

### **1.21. Monthly Project Progress Meetings**

The *TA* shall attend a monthly progress meeting to present and discuss progress reports for each individual project. The *TA* shall allow for meetings to be held on a monthly basis at BAS Cambridge up to completion of Work Stage 3. For work stages 4, 5 and 6 the *TA* monthly progress meetings will be via Skype. The *TA* Project Manager shall allow for attending the Construction Partner monthly progress meetings in work stages 4, 5 and 6 via Skype.

The agenda shall be produced by the *TA* Project Manager and submitted to the NERC Project Manager for approval. Minutes shall be recorded and issued by the *TA*. The meetings shall be chaired by the NERC Project Manager.

Monthly Progress Meetings are not required beyond Completion of Construction (i.e. not required during defects period).

### **1.22. Project Board Meetings**

The *TA*'s Framework Director shall be required to attend all project board meetings. These shall be held every three months, with the location to be agreed by all parties.

Agenda and minutes shall be produced by the *Client*, however the *TA* shall allow for preparation of his deliverables to present at meetings (i.e. design drawings, programmes etc) as required. The meeting shall be chaired by the Senior Responsible Owner (SRO).

The *TA* shall not be required to attend project board meetings during the Defects Period, but shall be required to attend Project Board at completion of the Defects Period.

### 1.23. Peer Reviews

The purpose of the Peer Reviews is to undertake independent reviews of the *TA*'s deliverables to ensure that the work undertaken meets the *Client*'s objectives and requirements for the project.

The *TA* shall allow for Peer Reviews of the following deliverables;

- Feasibility Study,
- Assessment Study, and
- Developed Design Reports.

The Peer Review Team shall be appointed by the *TA*. Peer review can be either through the use of external parties, or through the use of others within the *TA*'s organisation who have had no direct involvement in the works to date.

The Peer Review Team shall comprise members who are of an appropriate discipline and have appropriate experience and/or professional status i.e. shall be Chartered in the appropriate disciplines for the work they are reviewing. Proposals for the parties to undertake Peer Reviews shall be submitted to the *Client* for approval prior to undertaking the peer review.

The *TA* shall provide all information required for each Peer Review to the agreed Peer Reviewer.

Immediately following each Peer Review, the Peer Review Team shall produce a report of the findings of the Peer Review which they shall send to the *Client* within 5 working days.

The *TA* shall, as soon as practicable following receipt of any report of the Peer Review Team, respond to each such report with details of how he intends to incorporate any alterations necessary as a result of the Peer Review Team's findings, including mitigating any additional cost or time implications. The *TA*'s response or responses shall be forwarded to the *Client* within 5 working days.

### 1.24. Performance Review and Measurement

The *Client* considers robust performance measurement to be critical to the success of the Framework Agreement. The Framework Manager shall be responsible for the *TA*'s contribution to performance review and measurement, whilst the *TA*'s Framework Director shall be ultimately responsible for the overall Framework Agreement performance.

The Key Performance Indicators (KPIs) for all services under this Framework Agreement shall be jointly agreed between the *TA* and *Client*. Overall contractual performance shall be reviewed as part of the Framework Agreement Delivery Meeting held every 6 months (see Section 2.12). KPIs shall also be reviewed on individual project delivery every 3 months as part of the Quarterly Performance Review meetings (see Section 4). Both assessments (Framework Agreement and project) shall review the following;

- *TA*'s performance under the agreed KPIs,
- *Client*'s performance under the agreed KPIs,
- Improving mutual performance,
- Incentives,
- Sustainability and
- Health and Safety.

The TA Framework Director shall be responsible for agreeing the Performance Review Report with the AIMP Programme Director in advance and shall attend the Framework Agreement Delivery Meeting. The TA Project Manager shall be responsible for providing performance reports at project level.

The project assessments shall review all aspects of a project relative to the stage reached and shall address such issues as behaviours, compliance, timeliness, value and quality against defined acceptance criteria and agreed performance standards. The assessment shall cover deliverables and the performance of the project relative to the project requirements and objectives as set out in the project management documentation, and notwithstanding any particular requirements the review shall always cover the key performance indicators of cost, time and quality.

Where the assessment identifies aspects of the *TA's* performance as requiring attention or improvement the *TA* shall be expected to include within his Monthly Framework Agreement Progress Report the actions he intends to take or has already taken to resolve or rectify the situation.

If the review highlights problems or shortcomings by the *Client*, these shall be actioned by the Project Manager as appropriate and the result/outcome notified to the *TA*.

## **1.25. COMPLIANCE WITH LEGISLATION**

**All works carried out under the Framework Agreement shall be completed in full compliance with all relevant UK Legislation unless specific requests for deviations are submitted to, and approved by, the *Client* or as specifically instructed by the *Client*.**

### **1.25.1. Health and Safety**

**The *TA* shall undertake any overseas project in full compliance with all UK health and safety legislation**, including the current Construction (Design and Management) [CDM] regulations. In addition the *TA* shall comply with the *Client's* additional Health and Safety Policy (see Annex A).

The *TA* shall also be required to liaise closely with the *Client* to ensure that the significant risks and buildability issues associated with overseas projects are appropriately identified, addressed and residual issues captured and communicated.

The *TA* shall ensure that consideration is made to safety at all stages throughout all stages of the works, and shall adopt all aspects of good practice to ensure that safety issues are identified, mitigated, recorded and communicated effectively.

The *TA* shall notify the *Client* immediately of any breaches to health and safety policy.

### **1.25.2. CDM Advisory Services**

The *TA* shall be required to provide CDM Advisory services to the *Client* in order to facilitate full compliance with the current CDM Regulations. This assistance shall be allowed for in the rates submitted in the Pricing Document.

### **1.25.3. Building Regulations**

Overseas projects shall adopt the principles of the Building Regulations as far as is reasonably practicable. Where deviations are required, the *TA* shall request approval from the *Client* for these to be adopted.

In the case of overseas projects, these shall not be notifiable to the relevant authorities, although the *TA* shall be required to provide to the *Client* certification from a Building Control Specialist that



the design works they are responsible for are in compliance with Building Regulations. The certification shall record any deviations from the Building Regulations, and shall include details of the rationale for, and approval of, the deviations.

The *TA* shall note that BAS is aware of certain environmental and operational constraints that preclude compliance with Building Regulations. The *TA* shall therefore liaise with BAS throughout the design development to ensure that these constraints are appropriately addressed and the deviations from Building Regulations appropriately recorded.

#### **1.25.4. Equality Act**

Projects in the UK must be undertaken in full compliance, with the requirements of the Equality Act.

Overseas projects shall adopt the principles of the Equality Act as far as is reasonably practicable. Where deviations are required, the *TA* shall request approval from the *Client* for these to be adopted. All deviations from the requirements set out under the Equality Act shall be recorded, detailing the rationale for, and approval of, the deviations.

#### **1.25.5. Design Works**

All design works shall be undertaken in accordance with UK legislative requirements, current design standards (including Eurocodes) and industry best practice.

The *TA* shall pay full consideration to buildability during the design stage, notably paying attention to the constraints on construction in the Antarctic environment and limitations resulting from shipping and handling constraints.

#### **1.26. Critical Systems Analysis**

The constraints on operations, construction and maintenance resulting from the adverse environmental conditions and challenging logistics associated with the overseas research stations means that all projects must have sufficient robustness to ensure that operations can be maintained with minimal reliance on external support. This is of critical importance in relation to “Life Support Systems” i.e;

- medical support,
- potable water supply,
- power, and
- heating.

The *TA* shall, in conjunction with the *Client*, undertake a Critical Systems Analysis for every project in order to identify;

- elements of the project considered as Life Support Systems,
- elements of the project which directly influence other life support systems,
- elements of the project which indirectly influence life support systems.

Following the identification of Life Support Systems for a project, the Critical Systems Analysis shall assess the impact that failure of systems shall have on operations and BAS’s ability to adequately support life and shall develop mitigation plans to provide backup support to the critical systems.

In undertaking any design of Critical Systems, the *TA* shall ensure that the designs developed are sufficiently robust to minimise the risk of failure and to maximise the ease with which mitigation measures to reinstate failed systems can be implemented.

### 1.27. BIM

The Government Construction Strategy (GCS) requires that: *Government shall require fully collaborative 3D BIM (with all project and asset information, documentation and data being electronic) as a minimum by 2016.*

The TA shall note that at present, BIM is not fully adopted in BAS and one of the elements of this Framework Agreement shall be project works to support the implementation of BIM systems within BAS, the current aspiration being for Level 2.

The TA shall be required to develop the BIM Protocol for individual projects as necessary and shall act as the Information Manager for each project.

It is proposed that the Construction Industry Council (CiC) “*Building Information Model (BIM) Protocol*”, along with PAS1192 and the Digital Plan of Work (DPW2013) shall form the basic BIM Protocol structure.

The *Common Data Environment* will be hosted by the *Client*.

Whilst the process proposed above shall be used for the purpose of pricing, the TA shall be required to optimise the BIM processes and application to projects to reflect the delivery strategy developed for each individual project.

### 1.28. Government Soft Landings

Government Soft Landings (GSL) is about adopting a mind-set and a process to align design and construction with operational asset management and purpose. This alignment means that the needs of the end-user shall be considered and addressed throughout the project lifecycle, from project initiation onwards. GSL shall be applicable to all new build projects and major refurbishments.

More information on GSL can be found at <http://www.bimtaskgroup.org/gsl-department-guidance-documents/>.

The Project Manager shall undertake the role of GSL Champion.

The TA shall ensure that the needs of key stakeholders [including end-users and facility maintenance] are considered and incorporated in the development of options and design development throughout their involvement in the project.

The TA shall work with the *Client* to identify targets for each project, and to establish the systems and processes through which required outcomes (functionality & effectiveness, cost and environment) shall be measured under the Post Occupancy Evaluation (POE).

The TA shall not be required to have active participation in the POE beyond the Defects Period.

### 1.29. Sustainability Assessment

Sustainability and environmental protection is a key criterion for BAS and shall be engrained at the core of every project delivered by the TA.

The Feasibility Report in work stage 1 and the Concept Design in work stage 2 shall consider sustainability, and in particular the carbon cost when assessing the different options.

All projects shall develop a Sustainability Management Plan, aligned to the AIMP Sustainability Strategy, part of which includes a requirement for CEEQUAL or BREEAM assessment (or similar approved), unless noted otherwise in the Task Order. The TA shall be responsible for providing qualified assessors to undertake the CEEQUAL and BREEAM appraisals. The TA shall be

responsible for undertaking these appraisals at all stages of the project (including after engagement of Construction Partner).

All new build projects shall be required to achieve an “Excellent” rating (or equivalent) wherever possible, and refurbishment projects aim to achieve a “Very Good” rating wherever possible.

All works must be in full compliance with the Protocol on Environmental Protection to the Antarctic Treaty requirements.

### 1.30. Surveys and Investigations

The *TA* is **NOT** required to make allowance for the capital cost of surveys and investigations within the tender prices, but shall be required to price for the following;

- identifying data required for a project and notifying the *Client*,
- reviewing information provided by the *Client* to determine suitability or otherwise to support the *TA*'s work,
- identifying where additional surveys and investigations are required to support his work, and agreeing requirement with the Project Manager,
- scoping and costing of surveys and investigations,
- obtaining quotations for surveys and investigations, noting the requirement to comply with Public Procurement Legislation and to obtain a minimum of 3 No. quotes from suppliers,
- reviewing quotations and providing recommendations to the *Client* in relation to the best value for money option,
- procuring the surveys and investigations,
- management of the suppliers of the survey and investigation works during the Framework Agreement,
- reviewing deliverables from the suppliers for completeness and accuracy and
- payment of the suppliers.

The *Client* shall provide additional Task Orders to cover any works outside of those listed above, including the cost of the survey and investigation works and any supervision the *TA* is required to provide to oversee the delivery of the survey and investigation works (as agreed with the *Client*).

The procurement, liabilities and hand-over of surveys between the *Client*, *TA* and *Construction Partner* has been set out in a memo, attached here in Annex B.

The surveys and investigations required for each project cannot be defined and shall vary in nature, scale and complexity from project to project, however the following are likely to be required for projects during the Framework Agreement period;

- asbestos surveys,
- topographical surveys,
- ground investigation and contamination surveys,
- buried object surveys including Ground Penetrating Radar (GPR) surveys,
- utility and services surveys,
- structural and condition surveys,
- ecology (UK only),
- archaeological (UK only) and
- surveys to obtain wave data and ice / snow loading data.

All information shall, unless the *Client* directs otherwise, be disclosed to the Construction Partner as part of the Construction Partner's Contract, Site Information.

### 1.31. Business Cases

The *Client* operates a process which aligns with the Public Sector Business Case, "Five Case Model" which requires financial approvals at 4 No. key points through a project lifecycle;

- Strategic Outline Plan (SOP) - completed at Work Stage (WS) 1 (see Volume 3),
- Strategic Outline Business Case (SOBC) – completed at WS2 (see Volume 3),
- Outline Business Case (OBC) – completed at WS3a (see Volume 4) and
- Full Business Case – completed at WS4a (see Volume 4).

Whilst the principal business case documentation shall be developed by the *Client*, the *TA* shall be required to provide information and documentation in order to support submission of the various business cases.

The *TA* shall note that the level of detail required for the Business Cases increases as the project progresses i.e. the SOP shall require minimum input whilst the level of information required for the FBC may be significant.

Likewise, the level of detail required at each stage shall be proportionate to the value of the project the Business Case is associated with. For projects where the value exceeds £2M, the Business Cases shall be subject to detailed scrutiny and therefore shall require additional supporting documentation.

Generally, the *TA* shall allow one month for obtaining approvals of Business Cases, however, the *TA* shall note that approval of Business Cases exceeding £10M can take up to three months to gain approval and the *TA* shall take this into consideration when developing programmes for each project.

The *TA* shall be required to produce the Investment Appraisals to support each of the Business Cases (see Volume 3, Annex A).



**British  
Antarctic Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

# Health and Safety Policy

This policy sets out the commitment, responsibilities and organisation arrangements that provide a framework for the implementation of a positive, open and pragmatic health and safety culture at the British Antarctic Survey.

**October 2018**

## Health and Safety Policy Statement

The British Antarctic Survey (BAS) is a world class research organisation based in Cambridge UK predominantly operating in the Antarctic and the Arctic. The polar regions present many health and safety risks not normally encountered in the everyday workplace. For this reason, the key to our continued safe operation is our highly experienced and skilled staff. BAS places the highest priority on the health and safety of our staff, and as a result, top management are dedicated to strong, active health and safety leadership.

BAS is committed to:

- Developing and maintaining a pragmatic, positive and open culture where health and safety is recognised by all staff to be a fundamental element in all we do.
- Complying with, and where possible exceeding, all our legal obligations for health and safety, both in the UK and overseas.
- Continuously improving our health and safety performance.
- Maintaining our accreditation to the British Standard OHSAS 18001, the International Business Aviation Council's IS-BAO safety management standard, and fulfilling the legal requirements of the International Maritime Organisation's ISM code.

The legal entity of BAS is UK Research and Innovation (UKRI) of which the Natural Environment Research Council (NERC) is part of UKRI. BAS also operates to the UKRI Health and Safety Policy, arrangements and codes.

To achieve our commitments BAS will:

- Maintain a health and safety management system which sets demanding health and safety objectives and targets. This includes assigning clear health and safety management responsibilities.
- Identify the hazards and assess the risks created by our activities, and so far as is reasonably practicable eliminate, control or mitigate against those risks.
- Provide our staff with the information and training necessary for them to carry out their jobs safely.
- Appoint competent people to provide specialist health and safety advice to line managers and staff.
- Consult our staff, collaborators and union appointed safety representatives on health and safety matters.
- Manage the health and safety of all contractors and visitors (including visiting scientists and students) to our sites and ships.
- Adopt a twenty-four hour, seven day a week, duty of care for our staff and others working on our stations, ships and in the field in Antarctica.
- Review our health and safety performance at regular intervals to provide assurance and drive continuous improvement in performance.

Signed:



Prof Dame Jane Francis (Director)

Date: 22<sup>nd</sup> October 2018

## Statements of responsibilities for Health and Safety

### Senior Management

1. The Director of the British Antarctic Survey (BAS) is responsible for the safety of all operations, and for the safety of others that may be affected by those operations. The BAS Director reports to the NERC Chief Executive, who in turns reports to the UKRI Chief Executive Officer, who is responsible for the discharges of these duties.
2. The BAS Director has appointed the Director of Operations to be responsible at Executive Team level for leading and implementing health and safety throughout the Survey.
3. Additionally, the Director of Science, Director of Innovation, and the Head of Corporate Services, as part of the BAS Executive Team, have the duty to make sure that: -
  - a. The hazards and risks under their responsible areas are identified, assessed and controlled, as far as reasonably practicable.
  - b. The individual training needs of staff in their department are identified and met.
  - c. Each member of his/her staff is provided with the appropriate information and instruction to allow them to carry out their job safely and without risk to their health.
  - d. Each member of staff is supervised at an appropriate level taking into account their knowledge, experience and ability.

### Line-Management

4. BAS considers health and safety to be a line management responsibility; those staff with Line Management responsibilities must: -
  - a. Familiarise themselves with the BAS Health and Safety Policy and associated procedures.
  - b. Ensure that risk assessments are completed and reviewed regularly.
  - c. Ensure that their staff are trained and aware of the hazards in the workplace.
  - d. Ensure that their staff are aware of the emergency evacuation arrangements.
  - e. Ensure that their staff are aware of the first aid arrangements.
  - f. Provide appropriate supervision, especially for young and inexperienced staff.
  - g. Ensure that their staff follow health and safety rules and instructions.
  - h. Regularly reviewing the working practices to improve health and safety.
  - i. Ensure that their staff are aware of and use the accident, incident and near-miss (AINME) reporting procedures employed by BAS.
  - j. Manage the return and rehabilitation of staff that have been away from work due to injury, illness or stress.
  - k. All managers must attend the NERC 'Safety Management in a Research Environment' course within twelve months of their appointment.
5. More detailed information about the role and responsibilities of line managers are detailed in the BAS document [Health & Safety Responsibilities of Line Managers](#).

## All Staff

6. Each member of BAS staff has the duty to: -
  - a. Take care and ownership of their own health and safety and that of their colleagues.
  - b. Follow the health and safety procedures set out by BAS.
  - c. Cooperate with managers in the implementation of BAS health and safety policy and procedures.
  - d. To report accidents, incidents, unsafe acts/conditions and near misses (AINM) through the appropriate [BAS AINM](#) reporting system
7. The BAS Health & Safety Policy, alongside specific procedures and codes of practice relating to work on site or elsewhere by BAS staff, are listed on the BAS Health and Safety Procedures Schedule and via the [BAS intranet/Health and Safety](#). BAS policies and procedures must be observed by all staff and by visitors to the sites. Staff failing to observe them will be subject to BAS disciplinary procedures. Visitors failing to observe them may, in serious cases, be banned from the site.

## Health and Safety Responsibilities during BAS operations overseas

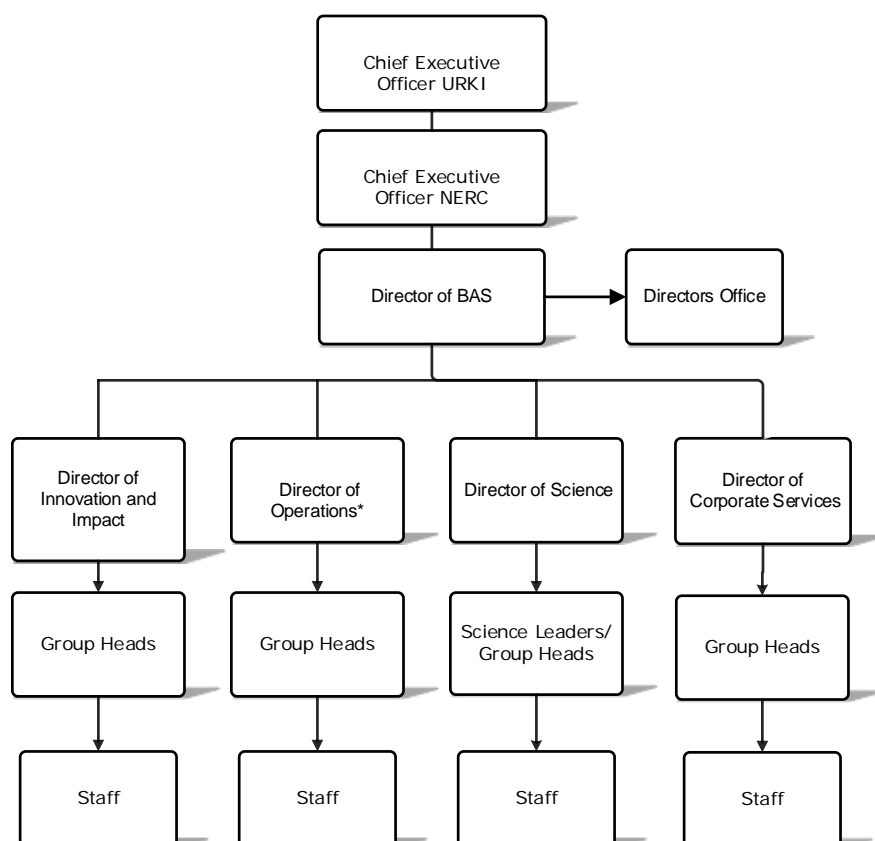
8. For Antarctic operations the responsibility for leadership and implementation of health and safety is delegated to the 'on site' responsible persons i.e. Station Leader, Ships' Master and the Chief Pilot, or in the field the Field Operations Manager. They assume the overarching health and safety responsibilities and duties as identified for BAS Executive Team members and the BAS Management Team.
9. At all BAS Antarctic and Arctic stations, the Station Leader maintains overall responsibility for the health and safety of staff including visitors or non-BAS employees working on their station. For all BAS field activities, it is the BAS Field Operations Manager who assumes responsibility. Detailed roles and responsibilities for both the Station Leader and the Field Operations Manager are detailed in the [BAS Safety Management Manual](#) and the [BAS Field Work health and Safety Plan](#).
10. On board BAS vessels the Master has the full responsibility for the safety of the ship and all those on board. The day-to-day co-ordination of Health and Safety matters is delegated to the Ship's Safety Officer. Detailed roles and responsibilities for both the Master and the Safety Officer are detailed in the [BAS ISM management system](#).
11. The safety of BAS air operation is the overall responsibility of the Chief Pilot. The Chief Pilot appoints a Flight Safety Office who is considered independent of normal line management chains for health and safety matters and can report directly to the Director of Operations. Detailed roles and responsibilities for both the Chief Pilot and the Flight Safety Officer are documented in the [BAS Air Unit Safety Management System](#).
12. For BAS staff travelling and working overseas in locations other than Antarctica the normal line management chain applies (refer to Figure 1). For all travel and work within Polar Regions, the Figure 2 management chain applies. Line managers must ensure the [NERC Overseas Safety Procedure](#) is followed for all overseas trips. Any overseas activities other than travel and conference meetings such as field work or laboratory work, must be subject to a suitable risk assessment. Before overseas activities are permitted this risk assessment must be approved by the BAS Health and Safety Adviser and/or the BAS Operations Manager. Further details are found in the [BAS Working Overseas Safety Procedure](#).

## Competent Persons



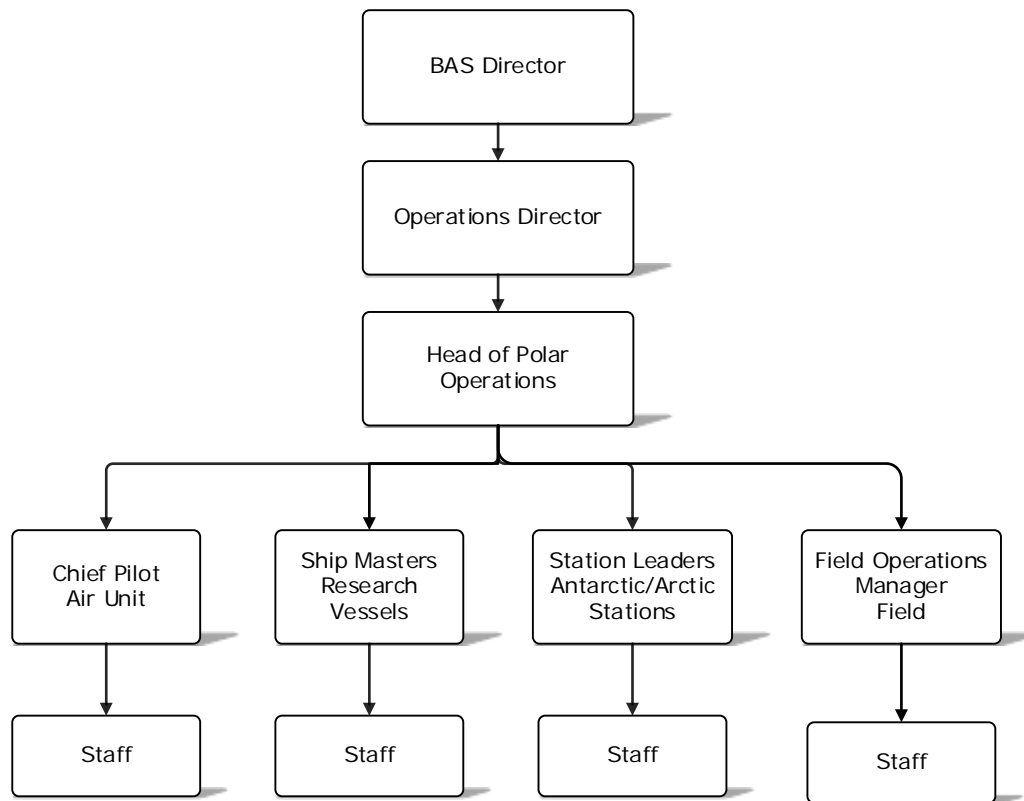
13. The Director has appointed a Health and Safety Adviser to advise on the discharge of the duties outlined in this policy. The BAS Health and Safety Adviser reports to both the BAS Executive Team and the BAS Management Team. The [Health and Safety Adviser's Terms of Reference](#) details their main duties.
14. The names of Staff with Specific Health and Safety Responsibilities are contained within the Health & Safety Guidance document [List of Health and Safety Roles and Responsibilities](#)
15. The NERC Health and Safety Adviser is also available for consultation with the BAS Director and BAS Health & Safety Adviser and will provide information or make site visits for audits as required.

Figure 1 Diagram showing lines of health and safety responsibility at BAS



\* Executive Team Member appointed with responsibility for Health and Safety at BAS

Figure 2 Diagram showing lines of responsibility for leading and implementing health and safety during BAS operations in Polar Regions.



# Organisational Arrangements for Health and Safety

## BAS Safety Management System

1. The BAS Safety Management System (SMS) comprises three specific but connected systems for Land, Sea and Air. The BAS SMS incorporates risk assessment, COSHH assessment, safe operating procedures, safe systems of work, standing instructions, lines of responsibility, training, preparations for emergencies and methods of audit and review. This BAS Health & Safety Policy and associated corporate Safety Procedures shall all be considered as the top level policy for the Land, Sea and Air system.
2. **LAND.** The BAS SMS for land-based operations is certificated to BS OHSAS 18001. The SMS manual and associated information for the [BAS Land Safety Management System](#) is managed through the [BAS Intranet](#).
3. **SEA.** The BAS Health & Safety Policy includes all requirements of the International Maritime Organisation, “International Management Code for the Safe Operation of Ships and for Pollution Prevention” (ISM Code). BAS implements the ISM Code through a [BAS ISM Safety Management System](#) that details BAS policy with regard to safety and environmental protection and the methods employed to realise that policy.
4. **Air.** The component of the BAS Safety Management System that executes the safe operation of the BAS aircraft is accredited to the International Business Aviation Council’s IS-BAO safety management standards and is managed through a specific [BAS Air Operation Safety Management System](#).

## BAS Health and Safety Management Team

5. BAS has established a team of managers and safety coordinators who, through membership of the BAS Health and Safety Management team (HSMT), are responsible for ensuring the health and safety management system is effective throughout BAS. The members of HSMT and the terms of reference are set out in the [HSMT Terms of Reference](#). The emphasis of this team is the performance and continual improvement of the BAS Safety Management System.

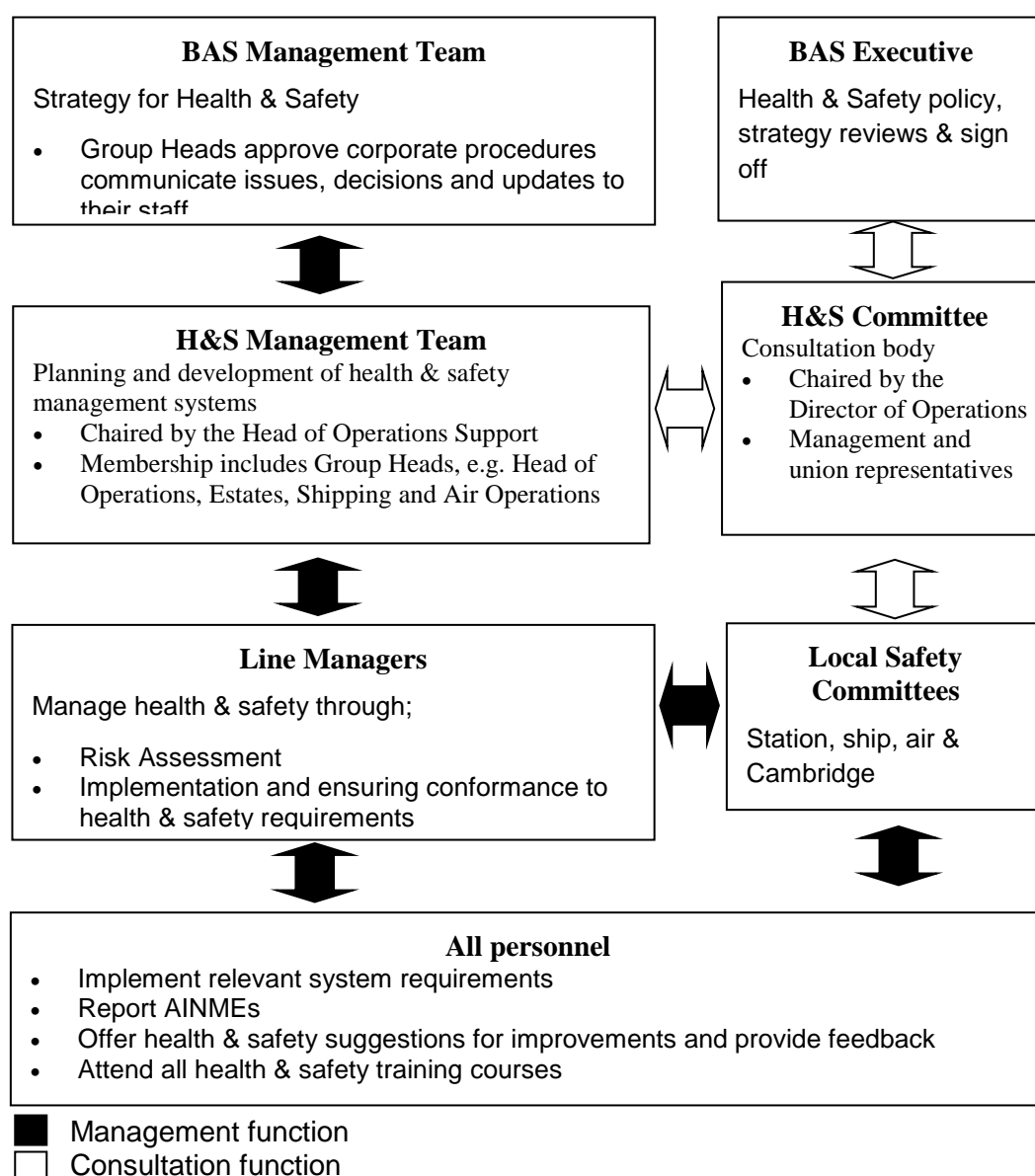
## BAS Health and Safety Management Committee

6. BAS has established a Health and Safety Committee (HSC) to provide a consultative mechanism on health and safety issues for all staff, including Trade Union Safety Representatives. The roles of the Committee representatives are set out in the [BAS HSC terms of reference](#) along with names of the Committee members provided in the [List of Health and Safety Roles and Responsibilities \(BASHS\(G\) 12\)](#)
7. The BAS Health & Safety Policy, arrangements and organisation is reviewed annually and then accepted by the BAS HSC after consultation with the NERC Trade Union Safety Representatives.

## Local Safety Committees

8. For polar bases, Cambridge and ships, BAS has established local Health and Safety Committees. The local committees have the responsibility for ensuring that health and safety is managed well locally and to communicate as necessary with the BAS HSMT, HSC and Health & Safety Advisor.
9. The UKRI and NERC Trade Unions have agreed to represent all staff on health and safety issues. Local Safety Representatives are available to all staff for consultation.

Figure 3: Structure of key roles and responsibilities within the BAS SMS



## BAS Emergency response arrangements

10. BAS has established a corporate [Incident Response Plan](#) to manage emergencies that may arise as a result of our operations. The BAS Cambridge site, BAS ships and Antarctic stations all maintain specific Incident Response Plans particularly developed for their circumstances. All emergency procedures have a programme of regular testing.
11. BAS seeks to suitably investigate all accident, incidents and near-misses occurring within the organisation. BAS has implemented an online reporting system ([AINME](#)) to which staff have access to report incidents. The BAS Health & Safety team co-ordinate investigations and the BAS Management Team (BMT) oversee the completion of actions and lessons learnt. Details of the BAS policy on incident investigation are found in the [BAS Safety Management Manual](#).

## New Starters and staff training

12. New staff will be informed of the BAS Health & Safety Policy Statement during the Health & Safety Induction with further job specific health and safety training as required. This will familiarise them with the BAS safety management system and the workplace hazards they are expected to encounter.
13. As well as job specific training, all permanent BAS staff will be provided with general health and safety training and competences. The training BAS provides is in line with the [NERC Procedure for Health and Safety competence](#). This training is mandatory for all BAS staff.

## BAS Safety Procedures

14. The operational control of day-to-day major hazards and risks is defined in BAS corporate safety procedures. These procedures identify the safe systems of work with which staff are required to follow to ensure safety risks are as low as reasonably practicable. [Appendix 2](#) provides a schedule of BAS Corporate Safety Procedures.

## Appendix 1 -BAS Health & Safety Procedures & Guidelines

| BAS Corporate Health and Safety Procedures and Guidance Index                   | Reference                    |
|---|------------------------------|
| List of Health and Safety Roles and Responsibilities                            | <a href="#">BASHS(G)12</a>   |
| Accident reporting and investigation (AINME)                                    | <a href="#">BAS HS-04</a>    |
| Biological risk assessment procedure  | <a href="#">BAS HS-10</a>    |
| Control of substances hazardous to health (COSHH) Procedure                     | <a href="#">BAS HS-09</a>    |
| Risk Assessment Procedure   | <a href="#">BAS HS-05</a>    |
| Management of contractors   | <a href="#">BAS HS-12</a>    |
| Mast policy   | <a href="#">BAS HS-15</a>    |
| Risk Assessment for activities involving New and Expectant Mothers              | <a href="#">BAS HS-07</a>    |
| Eye tests and spectacles for computer use guidance                              | <a href="#">BAS HS(G)-02</a> |
| Laboratory handbook and safe code of practice                                   | <a href="#">BAS HS-18</a>    |
| James Clarke Ross laboratory hand book and safe code of practice                | <a href="#">BAS BS-19</a>    |
| Work with ionising radiation (authorisation, responsibilities and arrangements) | <a href="#">BAS HS-14</a>    |
| Lone working Procedure  | <a href="#">BAS HS-16</a>    |
| Local Rules for work with unsealed radioactive sources                          | <a href="#">BAS HS-22</a>    |
| Chemical Spill Response Procedure   | <a href="#">BAS HS-17</a>    |
| Fire Safety Policy  | <a href="#">BAS HS-03</a>    |
| Personal Protective Equipment Procedure   | <a href="#">BAS HS-18</a>    |
| Laboratory Safe Code of Practice Poster   | <a href="#">BAS HS-20</a>    |
| An equitable organisational response to accidents and incidents                 | <a href="#">BAS HS(G)-09</a> |
| Guidance Ship Board Science Work Risk Assessment                                | <a href="#">BAS HS(G)-05</a> |

| BAS Corporate Health and Safety Procedures and Guidance Index | Reference                      |
|---|--------------------------------|
| Prevention of Carbon Monoxide Poisoning                       | <a href="#">BAS HS-24</a>      |
| Risk Assessment Guidance (Science Project Risk Assessments)   | <a href="#">BAS HS9G)-04</a>   |
| Risk Assessment Guidance (Office Working)                     | <a href="#">BAS HS(G)-01</a>   |
| Safety Training Requirements Guidance for BAS Cambridge Staff | <a href="#">BAS HS(G)-06</a>   |
| BAS Code of Practice for work with Explosives                 | <a href="#">Fourth Edition</a> |

| Author Name  | Signature   | Date            |
|--|---|-----------------|
| J. Forster Davidson, Health & Safety Advisor, BAS    |  | 15 October 2018 |
| <b>Approval Name, Department</b>                     |   |                 |
| J. Francis, Director, BAS                            |  | 22 October 2018 |
| S. Garrod, Operations Director, BAS                  |  | 16 October 2018 |
| P, Goodearl, H&S Management Committee Representative |  | 16 October 2018 |
|  | <hr/>   | <hr/>           |
|  | <hr/>   | <hr/>           |
|  | <hr/>   | <hr/>           |
|  | <hr/>   | <hr/>           |



## **Annex B – Liabilities Memo**

### **INTRODUCTION**

This memo is intended to explain the issues and potential options to deal with information transferred to the *Construction Partner* as part of the work service package.

#### **Case 1 - Historic Survey information**

These are generally factual documents, including any interpretation of the data. They will be;

- Commissioned by BAS prior to Construction Partner appointment
- Will be either undertaken by an external 3<sup>rd</sup> party or a BAS department (example BAS MAGIC)
- Surveys could be: topographical surveys, condition surveys, etc.
- Currently any warranties will be with UKRI. To transfer the liability for the information there will need to be a collateral warranty provided and assigned to the Construction Partner
- Alternatively, BAS can retain the liability and therefore the risk if any information is inaccurate.

#### **Case 2 - Future Survey information**

To ensure the data obtained from these surveys is as required the Construction Partner, BAS and the Technical Advisor (TA) shall be involved in developing the specification. This will ensure the data collected will be suitable for its use.

There are three options for who procures the surveys:

1. BAS procure the surveys and the survey company provide collateral warranties or BAS retain the liability;
2. The TA procure the surveys and obtain collateral warranties from the survey company; or
3. The Construction Partner could be instructed to procure and manage the survey and the results reviewed by BAS and the Technical Advisor (TA).

#### **Case 3 - Investigations**

Investigations are surveys which will be interpreted or analysed to assist the development of the design, for example ground investigations. Again, there are various options:

1. As with surveys if BAS procure them, then liability for the information remains with BAS unless a collateral warranty is provided by the company carrying out the investigation. Interpretation of the data is the liability of the Construction Partner, or if interpreted by the TA, then they shall provide a collateral warranty;
2. The TA could procure and interpret the investigations, and provide the necessary collateral warranties (TA and investigation company); or
3. The Construction Partner could procure the investigations and carry out the interpretation, and they would retain the liability.

#### **Case 4 – Data obtained by BAS**

This type of data mainly relates to environmental such as wind and weather data. Ownership remains with BAS but liability for interpretation is with the Construction Partner.

There is a specific issue with historic topographical survey data at Rothera.

- These are a series of topo surveys that have been undertaken by BAS and 3<sup>rd</sup> parties which cover parts of Rothera. It is understood that not all of the surveys have the same control points (aka datum points), therefore there is an exercise to merge these surveys and verify the accuracy and completeness.
- It is considered that this work should be carried out by the Construction Partner, the results reviewed by BAS and the Technical Advisor (TA). Any short-comings, discrepancies or gaps should then be collected, reviewed and solutions agreed.