

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

**Scope**

**Volume 1**

**GENERAL INFORMATION**

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## 1. Purpose of the services

This volume outlines the structure of the Scope, provides a brief introduction to the structure and function of British Antarctic Survey (BAS) and highlights the drivers behind the requirement for Technical Advisor (TA) services.

### 1.1. Structure of Scope Documentation

The Scope documentation details the services to be provided by the TA.

Throughout the Scope, where reference is made to the “*Technical Advisor*” or “TA”, this is the *Contractor* under the Framework Agreement.

The Scope documentation is split into 4 No. volumes, which are structured as follows;

- Volume 1 – General Information,
- Volume 2 – Scope for all works,
- Volume 3 – Scope for enabling works and technical support (work stage (WS) 0 – 2), and
- Volume 4 – Scope for project works (WS 3 – 8)

All volumes of the Scope shall be read in conjunction with one another.

### 1.2. Background to BAS

BAS is an institute of the Natural Environment Research Council (NERC) which is an executive non-departmental public body funded by the Department for Business, Energy & Industrial Strategy (BEIS). BAS also provides the UK presence in the British Antarctic Territory, a role BAS undertakes on behalf of the Foreign and Commonwealth Office (FCO). Both NERC and BAS form a part of the UK Research and Innovation (UKRI). UKRI is the Contracting Authority and will delegate contract and project management responsibilities for this Framework Agreement to BAS.

BAS delivers and enables world-leading interdisciplinary research in the Polar Regions. Its skilled science and support staff based in Cambridge, Antarctica, the Falkland Islands and the Arctic, work together to deliver research that uses the Polar Regions to advance our understanding of Earth and our impact on it.

Through its extensive logistic capability and know-how, BAS facilitates access for British and international science communities to UK polar research. Numerous national and international collaborations, combined with an excellent infrastructure, help sustain a world-leading position for the UK in Antarctic affairs. The UK is one of over thirty countries operating scientific research facilities in Antarctica.

The organisational structure of BAS is presented at Annex A.

### 1.3. BAS Business Change

With the introduction of a brand new scientific research ship, the RRS Sir David Attenborough (SDA), due to enter into active service in 2020/21, BAS is undergoing a period of significant transformation change. The introduction of the SDA will have wide ranging impacts to both infrastructure requirements and logistics delivery. Consequently BAS and NERC have been developing over the past few years a series of infrastructure projects, collectively known as the Antarctic Infrastructure Modernisation Programme (AIMP). What is currently referred to as Phase I of this programme is essentially complete from a technical services perspective, however the AIMP continues to be a key driver in the BAS need for on-going TA services into AIMP – Future Phases.

Accordingly, on-going changes to the BAS operations and organisational structure shall be implemented over the lifespan of the Framework Agreement and the *TA* shall be required to work with BAS to ensure project works align with the evolving Operational Strategy and its Ship into Service initiative.

#### **1.4. Existing BAS Estate**

BAS has a large existing estate in the UK and Antarctic which it continues to maintain and develop in order to provide continued support of polar science operations. BAS also maintains infrastructure at King Edward Point, South Georgia (owned by South Georgia and South Sandwich Island Government) and leases facilities in the Arctic.

Along with the introduction of the changes associated with the SDA, BAS is also looking to review, consolidate, and improve the operational efficiency of the wider BAS estate over the next ten years, notably at Rothera Research Station.

To facilitate the exchange of appropriate information to offer efficiencies throughout the operation of any new or altered facilities BAS have developed a set of Organisational Information Requirements (OIR) and Asset Information Requirements (AIR). These should be referred to in the preparation of any project specific Client's Information Requirements guiding the necessary information to be collated in the Project Information Models.

#### **1.5. BAS Locations**

BAS is located in Cambridge, with 5 No. permanent overseas Research Stations;

- Rothera – Adelaide Island, Antarctica,
- Halley VI – Brunt Ice Shelf, Antarctica,
- King Edward Point - South Georgia,
- Bird Island - South Georgia, and
- Signy – Signy Island, South Orkney Islands (summer only).

In addition to these there is the UK Arctic Research Station (located at Ny-Ålesund, Svalbard, Norway), and an office in Stanley, Falkland Islands.

Projects are considered likely at each of the Research Stations (of varying magnitude) and at BAS UK locations. Projects in the Falkland Islands and Punta Arenas (southern Chile) are possible.

It is not anticipated that any project works shall be undertaken at the stations in the Arctic.

Access to each of the 5 No. southern research stations is currently limited to the Austral Summer months only, although the timings and durations vary for each site. A summary of the approximate dates for access to each of the stations is provided under Annex B. The *TA* shall note however that these are approximations and shall vary annually as a result of climatic conditions each year.

The *TA* shall be required to work with BAS at any of the above locations, as well as other locations within the UK, as required for project delivery. Projects within the scope of AIMP could arise in Cambridge and at UK Port locations however, these projects will form a smaller part of the overall AIMP scope.

#### **1.6. Antarctic Mobilisation**

As part of the Scope, the *TA* shall be expected to mobilise personnel to the Antarctic Research Stations for both short term (less than 6 weeks) and long term (> or = 6 weeks) deployments.

Given the location of the stations, the limited resources available and the unique risks associated, there are a number of strict criteria that must be adhered to for all personnel who are to be mobilised. These include limitations relating to medical and dental fitness.

Please refer to Annex C for specific requirements for personnel mobilising to Antarctic Stations.

## 2. Specification and Description of the Services

### 2.1. Overall Requirement

The tender is for the procurement of a *TA* to support BAS (referred to as the *Client*<sup>1</sup>) in the delivery of a wide range of projects overseas. The Framework Agreement is for a period of ten years. The Contracting Authority shall be UKRI.

The full scope of projects that shall be undertaken during the Framework Agreement period is not known, and therefore no guarantee can be given as to the actual amount or type of work that may be ordered during the Framework Agreement period.

However, a series of potential projects have been identified and, subject to confirmation of funding, may require technical support from the *TA*. These include;

- Rothera Research Station:
  - New Accommodation Block(s)
  - Energy efficiency, renewables and sustainability projects
  - Site services upgrade
  - Rothera Point operational improvements
  - New Boat Shed
  - Replacement Bonner Laboratory
- Rothera Air Capability:
  - Runway refurbishment and possible extension
  - Hangar upgrade (or replacement)
- KEP Research Station Master Planning;
- Bird Island Master Planning;
- Signy Master Planning;
- Falkland Islands logistics and biosecurity hub;
- Halley VI decommissioning and future replacement;
- New build fuel storage (various locations);
- Energy efficiency and sustainability (all stations), and
- Various demolition works.

Given the wide ranging nature of the projects identified to date, it is essential that the *TA* shall be able to provide a broad scope of services a summary of which is provided at Annex D.

### 2.2. Delivery of the Services

Generally the services to be provided for individual projects fall into one of two categories;

- Enabling Works / Technical Services - work stages (WS) 0 to 2: Task Orders for enabling works (WS0 to 2) or bespoke requirements to support specific technical requirements. The

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<sup>1</sup> The *TA* shall note that whilst the Framework Agreement shall be formed with UKRI as the Contracting Authority, BAS, as an entity of UKRI and NERC, is referred to as the *Client* in the Scope for ease of reference.

scope of services required is set out in Volume 3 – Scope for Enabling Works and Technical Support.

- Project Works (WS 3 to 8; see section 2.4): this comprises activities for projects where a single preferred option has already been identified and approval has been obtained to progress this option. The scope of services required is set out in Volume 4 – Scope for Project Works.

Certain elements of the scope of services shall be required from the *TA* regardless of the *WS*; these are detailed in Volume 2 – Scope for All Works. Pricing for these elements of works shall be included in the percentages provided in the Pricing Document.

In the event that additional services are required outside of those defined in either Volume 3 or Volume 4, or are specifically excluded (see Pricing Document), fees for the individual Task Orders shall be negotiated between the *Client* and *TA* on an ad hoc basis.

The *TA* may be required to engage in some highly specialised works and shall therefore be required to provide specialist services not identified in Annex D. Where these services are required, costs for these services shall be agreed between the *TA* and the *Client* on an ad hoc basis.

Services which are considered to be specialist are those NOT listed in Annex D.

### **2.3. Construction Partner’s Contract**

For the purpose of this Framework Agreement, the *TA* shall assume that all Construction Partner’s Contracts shall be awarded as design and build contracts using the NEC3 Term Service Contract (TSC).

Where the *Client* proposes using an alternative form of procurement, this shall be notified to the *TA* as part of the Task Order for the project, and costs for the changes in the requirements shall be negotiated and agreed between the *TA* and the *Client* using the standard rates set out in the pricing document.

#### **2.3.1. Project Manager Terminology**

The *TA*’s attention is brought to the differing terminology used throughout the Scope for Project Manager roles;

- “*Service Manager*” – this refers to the individual from BAS listed in the Contract Data Part 1. As all *Services* are delivered through task orders the *Service Manager* will delegate his responsibilities to the appropriate “Client Project Manager”.
- “Project Manager” – this refers to the individual from BAS who undertakes an internal role to manage particular task orders for BAS. This individual shall be appointed as the *Service Manager* for the particular task order.
- “TA Project Manager” – this refers to the individual from the *TA*’s organisation who is appointed to manage an individual project for the *TA* (internal appointment).

The proposed allocation of Project Manager duties are outlined at Annex E. Where alternative allocation of duties is required on individual projects, these shall be set out in the respective Contract Data.

### 2.3.2. NEC4 TSC Supervisor

The *TA* shall assume that for all projects they shall be appointed to undertake the role of “*Supervisor*” as set out in the NEC4 Contract Documentation unless specifically instructed otherwise through the individual Task Orders.

### 2.4. Project Stages

All projects shall be undertaken as a series of consecutive work stages (WS), which are aligned with the RIBA Plan of Work 2013 stages as per the below table 1, with the exception of WS3 for MEP works, which will be amended in the RIBA Plan of Work to align with BSRIA BG6 2018 Work Stage 3;

Table 1 – Summary of BAS work stages

Work stage (WS)	Tender Reference	RIBA Plan of Work 2013
All work stages	Refer to Volume 2	All
WS 0 – Strategic definition	Refer to Volume 3	0 - Strategic Definition
WS 1 – Preparation and Brief		1 - Preparation and Brief
WS 2 - Concept Design		2 - Concept Design
WS 3a – Developed Design <sup>2</sup>	Refer to Volume 4	3 – Developed Design
WS 3b – Tender Preparation <sup>3</sup>		
WS 3c – Tender Invitation and Design Handover		
WS 4a – 65% Design and Target Cost Submission		4 – Technical Design
WS4b – Evaluation and Contract Award		
WS4c – 100% Design, Procurement and Mobilisation		
WS 5 – Construction		5 - Construction
WS 6– Handover & Close-Out	6 - Handover and Close Out	
WS 7 – In Use	7 - In Use	

<sup>2</sup> Can be run concurrently with WS3b

<sup>3</sup> Can be run concurrently with WS3a.

WS 8 - Financial Close.		n/a
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The RIBA Plan of Work Tool defines the tasks to be taken by the various project roles. The terminology of the project roles differs from this Scope. The table below therefore maps the terminology accordingly, so that the RIBA Plan of Work Tool can be employed on the BAS projects where the Construction Partner and Technical Advisor role is utilised. Other projects may need to define other roles, depending on the procurement model adopted.

<b>RIBA Plan of Work Tool - Terminology</b>	<b>Scope - Terminology</b>
All roles	All roles
Client and/or Client Advisor	Client and/or Technical Advisor (TA)
Project Lead	TA Project Manager
Lead Designer	TA Design Lead / Technical Manager
Architect	TA Architect
Building Services Engineer	TA Building Services Engineer
Civil & Structural Engineer	TA Civil & Structural Engineer
Cost Consultant	TA Cost Consultant / Quantity Surveyor
Construction Lead	Construction Partner (CP) / ECI Contractor
Contract Administrator	Client PMO
Health & Safety Advisor	TA / Client / CP H&S Advisor
All additional project roles	All additional project roles

Whilst Volumes 2, 3 and 4 set out the specific requirements and deliverables that shall be provided by the TA, BAS has identified a series of key attributes that the TA shall be expected to adhere to in all elements of their delivery of services. These are set out at Section 2.6.

### 2.5. Level of Detail and Level of Information

The level of detail (LOD) and level of information (LOI) that shall be produced under each work stage is defined in the respective task order.

### 2.6. Key Attributes

The following provides a summary of the key attributes that the TA shall demonstrate in all elements of project delivery;

- **Collaborative Working:** All NERC projects, and notably those in the Antarctic, have unique challenges including the adverse environment and complex logistics and involve a diverse range of stakeholders. Project success shall therefore be heavily reliant on collaborative

working between all parties. The *TA* shall be required to work with BAS and other stakeholders to foster a multiparty collaboration culture and embody the principles of mutual trust and co-operation with an overall aim of delivering a successful project on time and to budget.

- **Continuous Improvement – Service Delivery:** BAS strives to ensure that continual improvement is made in all aspects of BAS operations, including the delivery of projects. We shall require the *TA* to demonstrate that they are measuring, recording and improving the performance of themselves, and their sub-contractors, through the use of Key Performance Indicators (see Volume 2). BAS shall also seek to gain feedback from the *TA* on the *Client's* performance to ensure that we are also providing continuous improvement in our own delivery of projects.
- **Continuous Improvement – Project Delivery:** Throughout the delivery of the Framework Agreement, the *TA* shall work to develop innovative ways of delivering project requirements in the most efficient and cost effective manner that demonstrate value for money and continuous improvement. BAS shall collaborate with the *TA* when carrying out critical examination of proposed Framework Agreement delivery and working practices. This shall be undertaken with a view to assessing how they can be improved in order to provide value added benefits to BAS, NERC, the Contracting Authority and the *TA*.
- **Single Point of Contact for Projects:** At project level, communication shall be primarily between the Project Manager and the *TA* Project Manager, who shall act as the single point of contact for all elements of the *TA's* project works. At Framework level, communication shall be primarily between the appointed Service Manager or its nominated delegate and the *TA* Framework Manager. This is illustrated at Annex F.
- **Co-ordination of delivery:** The *TA* shall ensure full co-ordination of work undertaken by different disciplines / parties, either internally within his organisation or by his sub-contractors. BAS shall require evidence that checks to ensure co-ordination exercises have been undertaken, and BAS shall not accept work that is not fully co-ordinated. The appearance of submissions to BAS shall also be consistent (see Volume 2).
- **Continuity of Personnel:** BAS is looking to develop strong working relationships with the *TA* over the duration of the Framework Agreement, and key to this will be building relationships with individual key personnel. In order to achieve this, the *TA* shall endeavour to provide continuity of individuals throughout individual projects and the Framework Agreement as a whole.
- **Continuity for Overseas Deployment:** The *TA* shall be expected to visit Antarctica and other overseas areas, and for certain projects, may be required to deploy individuals for prolonged periods for site supervision works. To achieve continuity, the *TA* shall therefore consider the need for deployment at the start of a project whilst selecting key members of their delivery team. BAS has a strong preference for individuals who will be mobilised to be involved from project commencement rather than brought in late on in the project development.
- **Achieve Best Value for Money:** The *TA* shall act in accordance with the Government's and *Client's* policy of working to achieve the best possible value for money taking into account the time, cost, quality and appropriate risk transfer requirements.

- **Maintenance of Operations:** in support of the delivery of world leading science it is essential that in undertaking any work, the *TA* considers means through which disruption to science delivery and operations is kept to an absolute minimum through project lifecycles.
- **Sustainable Development:** BAS as part of NERC and UKRI delivers world leading science in some of the most environmentally sensitive parts of the planet. The *TA* must therefore ensure that sustainability and energy efficiency is central to all project works undertaken.
- **Robustness of Design:** The remote location of some of the BAS stations creates unique challenges in relation to the design, construction and maintenance of the infrastructure. The *TA* shall be required to work closely with BAS in developing designs to ensure that issues such as buildability, robustness of critical systems (see Volume 2) and ease of maintenance are at the core of all projects.

### 3. Key Roles

An organogram of the outline structure for delivery of the Framework Agreement and project delivery is presented at Annex F.

#### 3.1. Client's Key Personnel

##### 3.1.1. Senior Responsible Owner

The Senior Responsible Owner (SRO) shall be a director of NERC or BAS and shall have overall responsibility for the effective administration of the Framework Agreement. They shall act as the final means of elevation for issues relating to the Framework Agreement.

##### 3.1.2. AIMP Programme Director

The AIMP Programme Director, shall be a senior manager of NERC or BAS, having responsibility for the programme budget, deciding how budgets will be allocated to projects, reporting to the Board and the overall commercial and financial relationship with the Technical Advisor. The AIMP Programme Director shall attend the quarterly Key Performance Indicator (KPI) meetings and biannual Framework Progress Meetings (see Volume 2).

##### 3.1.3. Service Manager

The Service Manager shall authorise 'call-offs' from the Framework Agreement, through the Task Order mechanism. They shall attend the quarterly Key Performance Indicator (KPI) meetings and biannual Framework Progress Meetings (see Volume 2). They may delegate their Service Manager responsibilities for specific task orders to named individuals within BAS.

##### 3.1.4. Project Managers

Named individuals shall be appointed by BAS to operate as the appointed Project Manager for each Project. This individual will also likely be appointed, under BAs delegations as the *Service Manager* under the individual Task Orders. The Project Manager is responsible for the overall delivery of any Project, and the *TA* Project Manager shall report to the named individual directly.

The Project Manager shall undertake the role of NEC4 TSC Project Manager, with delegations as noted at Annex E. The *TA* may on occasion be asked to undertake this role.

### 3.1.5. Project Boards

All NERC projects follow the Association for Project Management (APM) methodology for project management. Projects are directed by a Project Board, which shall typically comprise the following members:

- Senior Responsible Owner (SRO),
- End User Representatives (science and operations),
- Project Manager,
- NERC Financial Manager,
- Non-executive representative,
- BAS and NERC Specialists, and
- *TA's* representative.

The *TA* shall integrate with, support and form an integral part of the Project Board in principally supporting the Project Manager and shall be required to attend all Project Boards (see Volume 2).

### 3.1.6. BAS Specialists

Due to the nature and location of some BAS Operations (particularly BAS Antarctic stations), projects have unique constraints and requirements that shall need to be incorporated to ensure that the deliverables achieve project requirements.

It is accepted that the *TA* may not have a comprehensive understanding of the BAS specific constraints and requirements and therefore the *TA* shall be supported by BAS, notably in relation to certain specific disciplines e.g.;

- Information Communications Technology (ICT),
- Estates,
- Operations Delivery,
- Scientific Community,
- Finance.
- BAS Medical Unit (BASMU),

BAS support in delivery of specialist areas shall be co-ordinated by the Project Manager.

### 3.1.7. UK Shared Business Services

UK Shared Business Services (UK SBS) provide procurement support for the Contracting Authority UKRI (including NERC and BAS) and shall be the lead for the competitive tendering of this Framework Agreement and responsible for payment transactions to the Contractor. UK SBS shall use the Emptoris Contract procurement system (see Volume 4) and the oracle financial system.

UK SBS shall be responsible for payment of any agreed deliverables or contract milestones. All applications for payment shall be made via the Project Manager.

## 3.2. *TA's* Key Personnel

The *TA* is required to provide a series of named personnel for the Framework Agreement, as set out in the Technical Submission for the RFQ, including;

- TA Framework Director and
- TA Framework Manager.

These individuals shall, as far as reasonably practicable, be a continuous named appointment throughout the duration of the Framework Agreement.

Key personnel for individual projects shall be submitted to the NERC prior to commencement of any project and shall include;

- TA Project Manager (principal point of contact for the NERC project Manager),
- Key discipline leads (the key disciplines shall be identified as part of the Contract Data for the individual tasks),
- Construction (Design & Management) [CDM] Regulations Advisor.

These individuals shall, as far as reasonably practicable, be a continuous named appointment throughout the duration of any project.

In circumstances where the *TA* needs to change the named personnel during the Framework Agreement, the proposals shall be submitted in writing to the Project Manager, providing the Curriculum Vitae (CV) for approval by BAS. The *TA* shall note that no individuals shall be accepted who do not provide the levels of qualifications and experience set out in the *TA*'s tender submission.

The *Client* shall retain the right to refuse personnel proposed by the *TA* for use on any project.

### **3.3. TA's Antarctic Personnel**

The *TA* shall be required to mobilise personnel for both short and long term deployments to Antarctica, potentially both for Austral summer and winter seasons.

Given the remoteness of the locations, the small communities of personnel based at the BAS Antarctic Stations, and the logistical difficulties associated with the mobilisation of personnel, ensuring that the right people are mobilised is critical.

The *Client* shall interview any personnel the *TA* proposes for mobilisation in order to provide reassurance that the individuals are appropriate for mobilisation.

In all circumstances, the Client shall retain absolute right to refuse any individual proposed for mobilisation. The rationale for refusal shall be provided to the *TA* through the TA Framework Director, but the *TA* shall be cognisant that refusals may be based on non-definable attributes (i.e. inappropriate attitude). The decision of the *Client* shall be final.

One of the key elements of life in the Antarctic is establishing strong community spirit between all individuals, and therefore the *TA*'s personnel shall be required to participate in all elements of Station life, which includes elements such as "Gash Duties" (general cleaning and maintenance of the Stations), and shall also be required to share accommodation.

It is also noted that whilst at BAS Overseas Stations, the *TA*'s employees shall comply with BAS policy on behaviour etc, and shall ultimately fall under the authority of the relevant BAS Station Leader.

See Annex C for specific details regarding deployment to BAS overseas stations.

## **4. Communications Strategy**

The proposed structures for the delivery of the Framework Agreement and individual projects are set out at Annex F.

All communications shall be conducted in line with the individual Project Communication Plans and in line with the Key Attributes set out at Section 2.6.

### **4.1. Framework Communication Plan**

The principal point of contact for the overall Framework Agreement shall be between the AIMP Programme Director and the TA Framework Manager. All Task Orders shall be issued to the *TA* through this route, and shall be the main route through which all issues with the Framework Agreement shall be addressed.

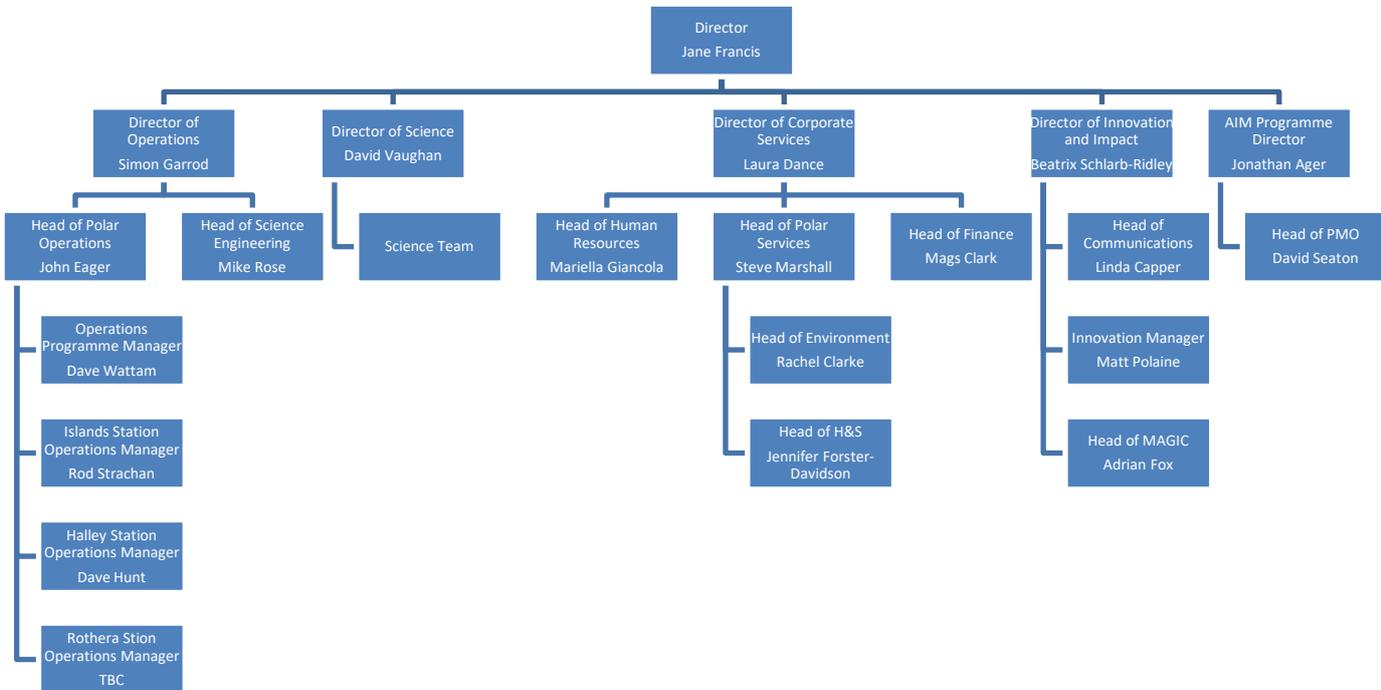
### **4.2. Project Communication and Stakeholder Plans**

There shall be a Project Communications and Stakeholder Plan for each project which shall be established by the Project Manager at project initiation. This shall set out the communications protocols for individual projects.

The *TA* shall be expected to contribute to the development and implementation of these communication plans throughout the lifecycle of the project.

As a general approach, the *TA* Project Manager shall act as the single point of contact for all elements of the *TA*'s works, and shall liaise directly with the Project Manager. On occasions, the *TA* may have to liaise directly with third parties although this shall only be when specifically instructed by the Project Manager.

# Annex A – BAS Organogram



## Annex B – Typical Antarctic Annual Operations Programme

### Antarctic Operational Timings

For the purpose of planning and programming, the *TA* must consider the following constraints in terms of operations at each of the Antarctic Stations.

Currently, construction works, visits, surveys etc. are undertaken during Austral Summer periods only. BAS is currently assessing the possibility of construction works (and operations) being undertaken year round, however, for the purpose of planning, the *TA* shall consider Austral summer working only at present.

The Austral Summer periods for each of the stations shall be assumed as follows (noting that exact dates shall vary year on year);

- Rothera:           Start of season – 01 November  
                          End of season – 31 March.
- Halley VI:         Start of season – 25 November  
                          End of season – 28 February.
- Bird Island:      Start of season – 15 October  
                          End of season – 31 March.
- KEP:               Start of season – 15 October  
                          End of season – 31 March.
- Signy Island:     Start of season – 01 November  
                          End of season – 15 March.

All cargo shall be transported via ship from the UK, and for planning purposes, the *TA* shall consider the following as the “first call” and “last call” by BAS ship to each of the Stations;

- Rothera:           First call – 15 December  
                          Last call – 31 March.
- Halley VI:         First call – 25 December  
                          Last call – 28 February.
- Bird Island:      First call – 15 November  
                          Last call – 31 March.
- KEP:               First call – n/a (utilises Fisheries Vessels as required)  
                          Last call – n/a (utilises Fisheries Vessels as required).
- Signy Island:     First call – 15 November  
                          Last call – 15 March.

Additional visits to the Stations are scheduled mid-season, however these are programmed dependent on operational and science requirements and therefore shall not be relied upon for transportation of cargo from the UK.

It shall be noted that cargo loading for the ships closes mid-August, and therefore all plant, materials etc. must be at the relevant UK port by 01 August.

## Annex C – Antarctic Deployment

The *TA* shall be required to provide personnel to deploy to the Antarctic and South Atlantic Islands both for short periods i.e. for site visits, inspections, surveys etc. (up to 6 weeks) and longer periods i.e. for site supervision (i.e. greater than or equal to 6 weeks).

In deploying to the Antarctic, any personnel shall be required to adhere to the standard BAS protocols and policies. The following provides key points in relation to these elements which the *TA* must consider when selecting personnel for deployment.

The cost of mobilising individuals to Antarctic is exceptionally high, places are in very high demand and the risks associated with deployment are considerable. Initial or short term site visits shall only be provided to individuals from the *TA* who will be critical in the delivery of projects. **Should individuals be mobilised and then not utilised on project works, the *Client* may seek to recover the cost of the visits from the *TA*.**

Title	Detail	Cost Allocation
<b>PRE-DEPLOYMENT</b>		
<u>Medical and Dental Checks</u>		
Medical Checks	<p>All personnel shall be required to undergo medical checks and approvals prior to deployment.</p> <p>Due to limited medical facilities in the Antarctic, certain medical conditions will automatically preclude individuals from deployment. Details can be found at <a href="https://www.bas.ac.uk/for-staff/polar-predeployment-prep/intro-guidelines-and-forms/medical-guidelines-and-forms/">https://www.bas.ac.uk/for-staff/polar-predeployment-prep/intro-guidelines-and-forms/medical-guidelines-and-forms/</a></p> <p>The <i>TA</i> shall be responsible for completion of Medical Examinations Forms by a doctor. Once completed, the Medical Forms shall be submitted to BAS Medical Unit (BAS MU) via BAS Human Resources (HR) for approval a minimum of 8 weeks prior to mobilisation. <b>THESE MUST NOT BE ISSUED TO THE BAS PROJECT MANAGER.</b></p> <p>The <i>TA</i> shall pay particular attention to the information provided in BASMU2 “Medical Aspects of Living and Working in Antarctica” which gives specific details of medical condition which shall or may preclude individuals from deployment.</p>	<i>Client</i>

Title	Detail	Cost Allocation
Passports and Visas	<p>Passports must be valid for a minimum of 6 months AFTER the individuals return date to the UK.</p> <p>Visas are not required for UK nationals (holding a UK passport). Visas shall be required for non-UK passport holders. These shall be arranged by BAS in conjunction with the TA. A minimum of 3 months notification shall be required to obtain visas for non-UK passport holders.</p> <p>BAS shall arrange work permits for all personnel through the Foreign and Commonwealth Office.</p>	<p>TA</p> <p>Client</p> <p>Client</p>
Vaccinations	<p>The TA shall be responsible for ensuring that his personnel has all necessary vaccinations (see "Medical Checks"), and shall provide evidence to BAS HR that these have been obtained a minimum of 8 weeks prior to mobilisation.</p>	Client
Dental Checks (and remedial works as required).	<p>Dental facilities are extremely limited and therefore all personnel deploying are required to obtain certification of dental fitness for mobilisation (see "Medical Checks"). Completed dental checks shall be submitted to BASMU via BAS HR a minimum of 8 weeks prior to mobilisation.</p>	Client
Disclosure of Criminal Records	<p>All personnel shall be required to disclose all Criminal Records (both spent and unspent) to BAS HR prior to deployment.</p> <p>The TA shall note that certain convictions (historical or current) may preclude individuals being deployed.</p>	Client
<u>Antarctic Training</u>		
Pre-Deployment Training - Short Term Deployment	<p>An initial briefing shall be given by BAS personnel at BAS Cambridge prior to deployment. This shall comprise approximately half a day.</p>	Client
Pre-Deployment Training - Longer Term Deployments	<p>The TA may be required to attend a one week residential training course which shall be held in Cambridge, typically in the second week of September prior to deployment.</p>	Client.

Title	Detail	Cost Allocation
First Aid Training	<p>Personnel mobilising for Short Term Deployments shall undergo “First Aid at Work” training as a minimum prior to deployment. This shall be arranged and paid for by the <i>Client</i>.</p> <p>More comprehensive first aid training is required for those on Long Term Deployments (&gt;1 month). This may be provided by BASMU as part of the week training in Cambridge (see above).</p>	<p><i>Client</i></p> <p>As “Pre-Deployment Training - Longer Term Deployments”</p>
Mobilisation on Ships	The <i>TA</i> shall be required to undertake Personal Survival Training (PST) if they are to mobilise by ship (either BAS or otherwise) and must carry their <b>current</b> PST Certification with them at all times on the ships.	Client
<u>Clothing</u>		
Cold Weather Clothing	<p>BAS shall provide cold weather clothing for all personnel. The <i>TA</i> shall be required to attend BAS Cambridge for fitting etc. of clothing.</p> <p>All cold weather clothing shall be returned to BAS on completion of the deployment.</p> <p>Sunglasses are essential for work in the Antarctic, and BAS shall provide standard sunglasses as part of the issued cold weather clothing. Any requirements for prescription sunglasses shall be discussed and agreed with the Project Manager prior to deployment.</p>	Client
Personal Protective Equipment (PPE)	All PPE including cold weather clothes) shall be provided by the <i>Client</i> .	<i>Client</i>
<b>TRANSIT</b>		
Travel to point of UK Departure	Travel to Antarctic shall be either via the Falkland Islands (departing from RAF Brize Norton), or via commercial flights from London Heathrow.	Client
UK Travel to Falklands,	Flights shall either be via MOD flight from RAF Brize Norton or Commercial Flights from London Heathrow. All flights, without exception, shall be economy class.	Client

Title	Detail	Cost Allocation
South America or South Africa.	The <i>TA</i> shall be required to adhere to the weight limits on all flights. Any excess baggage will only be accepted onto the BAS flights if it comprises less than 100kg in any instance and has been notified to BAS Operations Delivery a minimum of 1 month in advance. Costs associated with excess baggage charges shall be payable by the <i>TA</i> unless specifically approved as an exception to this by BAS.	<i>TA</i>
Accommodation during transit	Any hotel accommodation during the transit between the UK and Antarctic shall be arranged by and paid for by BAS. An in-country “meet and greet” service shall be provided by BAS. Accommodation shall be provided on a full board basis (i.e. at the hotel).	Client
Transfers to, and within, Antarctic	Flights to and within Antarctica shall generally be on BAS operated aircraft (DASH-7 or Twin Otter respectively) or via BAS Ship. In some instances, transportation may be provided by other means (i.e. other nations with Antarctic presence).	Client
Delays in Transit	Adverse weather may delay in transit to Antarctica. In such instances, any accommodation shall be provided by BAS as detailed above.	Client
Insurances	All travel, medical and personal insurances shall be covered by the <i>TA</i> .  Copies of insurance certificates shall be given to BAS HR a minimum of 8 weeks prior to deployment.	<i>TA</i>
Transport of Cargo	With the exception of personal luggage (as detailed above), all other cargo the <i>TA</i> requires to be mobilised shall be taken via the BAS ships, noting the ships schedule as detailed at Annex D.  Where cargo cannot be transferred by ship as a result of the <i>TA</i> not meeting shipping deadlines, any costs associated with commercial transfer of cargos shall be met by the <i>TA</i> .	Client  <i>TA</i>
<b>ANTARCTIC DEPLOYMENT</b>		
<u>General Conditions</u>		

Title	Detail	Cost Allocation
General Information	<p>General information regarding deployment can be found in the BAS Participants Handbook.</p> <p><a href="https://www.bas.ac.uk/wp-content/uploads/2015/04/bas_participants_handbook.pdf">https://www.bas.ac.uk/wp-content/uploads/2015/04/bas_participants_handbook.pdf</a></p>	n/a
Accommodation	<p>Living accommodation for all personnel <b>SHALL BE IN SHARED ROOMS</b>. This shall typically be either 2 No. persons or 4 No. persons per room dependent on location and availability. No alternative accommodation is available, and individual rooms shall not be provided.</p> <p>Ablutions are also shared facilities.</p>	Client
Messing	<p>All meals shall be provided by BAS.</p> <p>Specific dietary requirements shall be accommodated wherever possible; however this is not always possible because of logistical constraints.</p> <p>The TA shall notify BAS of any specific requirements a minimum of 2 months in advance of mobilisation, and shall notify BAS MU of any medical dietary requirements / allergies as part of the Pre-Deployment Medical.</p> <p>The TA shall note that where BAS is not able to accommodate specific dietary requirements (including certain allergies), this shall be considered a criterion for refusing permission for mobilisation.</p> <p>Vegetarian meals are catered for as standard and do not require specific notification.</p>	Client
Personal Account Undertaking (PAU)	<p>There are no banking facilities on the ship or stations. Instead, a Personal Account Undertaking (PAU) system is provided for all personnel going south. The PAU is used for expenditure of bar bills, shop or post office purchases, cash advances etc.</p> <p>Further details of the PAU system can be found at: <a href="https://www.bas.ac.uk/wp-content/uploads/2015/04/pau_guidance.pdf">https://www.bas.ac.uk/wp-content/uploads/2015/04/pau_guidance.pdf</a></p>	TA
"Gash" Duties	<p>Those deployed to Antarctic for longer periods (i.e. greater than 4 weeks) shall be required to participate</p>	n/a

Title	Detail	Cost Allocation
	in the "Gash Rota" (general house maintenance duties including cleaning of living areas, washing up etc.)	
Medical	<p>Medical support shall be provided by BAS staff.</p> <p>The TA shall note that medical facilities are basic and there is no provision for dental treatment. Where urgent medical treatment is required that is outside of the capabilities of the BASMU doctors present, individuals shall be medically evacuated to the nearest southern gateway. See Compassionate / Non-compassionate repatriation.</p> <p>Whilst basic medical supplies shall be provided by BAS, the TA's personnel shall be required to take any personal medication with them and in sufficient quantities for the duration of deployment.</p>	<p>Client</p> <p>TA</p>
Transport at BAS Stations	The TA's personnel shall not be provided with individual transportation at the Stations; the size of the Stations is generally such that transportation shall not be required.	n/a
Recreation	Personnel mobilising to the Antarctic shall be eligible to utilise recreational equipment whilst at the Stations, but shall need to be covered by their own insurances for any recreational activities undertaken.	TA
Welfare Support	The TA shall provide a named point of contact within their organisation that BAS HR can contact in case of emergencies relating to the TA's personnel. This individual must be contactable at all times and shall support BAS HR in arranging Repatriation etc.	TA
<u>Communications</u>		
Internet	<p>It shall be noted that whilst in Antarctica, internet capabilities are exceptionally limited and the TA must be capable of operating for prolonged periods without internet access (i.e. must be able to operate independently of company systems).</p> <p>Charges for internet usage shall be covered by BAS (noting limitations on personal use).</p>	Client

Title	Detail	Cost Allocation
Telephone	<p>Telephone calls are internet based and therefore calls to the UK are at national rates. The <i>TA</i> shall note the limitation on internet access stated above.</p> <p>BAS shall cover costs associated with business telephone calls (within reason), but the <i>TA</i> shall be required to use pre-paid telephone cards (e.g. BT Odyssey) for personal calls.</p>	TA
Comms “Black Out”	<p>The <i>TA</i> shall be aware that at times, i.e. in the event of a major incident, all personal communications may be stopped. This is imposed in order to enable BAS to be able to control the flow of information back to the UK, i.e. to be able to notify next of kin and key points of contact of issues rather than them being informed through social media etc. Any breach of such protocols shall be considered a disciplinary offence and may lead to the <i>TA</i>'s personnel being removed from Station as a non-compassionate repatriation.</p>	TA
<u>Working</u>		
Generally	<p>The <i>TA</i> shall ensure that any personnel mobilised to the BAS Stations shall have to be capable of operating independently of the support systems they would have in the UK, including having sufficient authority within their organisation for any approvals etc. that may need made for works undertaken whilst deployed.</p>	n/a
Working Times	<p>The Stations generally operate a working week of 0800 to 1800hrs Monday to Friday and 0800 to 1400hrs Saturday, and the <i>TA</i>'s personnel shall be required to work similar hours to enable effective support.</p> <p>No overtime charges shall be accepted by BAS for situations whereby these working times differ to those agreed between the <i>TA</i> and their staff.</p> <p>Any costs for additional overseas uplifts on salaries agreed between the <i>TA</i> and their employees will be in line with the <i>TA</i> travel policy and reimbursable by BAS as per the agreed Cost Plus Memo.</p>	Client

Title	Detail	Cost Allocation
Office Facilities	<p>The <i>TA</i> shall be provided with basic office space at the Stations, including desk, internet connection point and telephone (noting the limitations stated above).</p> <p>These facilities may be “hot desks” shared with BAS personnel, dependant on the location.</p>	Client
Office Equipment & Consumables	<p>Short term deployments - BAS shall provide access to office equipment (with the exception of computers) which shall be provided by the <i>TA</i>.</p> <p>BAS shall provide basic office consumables.</p>	<p><i>TA</i></p> <p>Client</p>
	<p>Long term deployments - All equipment (computers, printers etc.) and office consumables shall be provided by the <i>TA</i> and shall be transported as cargo via the BAS Ships (see “Transport of Cargo”).</p>	<i>TA</i>
Electrical Equipment	<p>All electrical equipment provided by the <i>TA</i> (including personal equipment belonging to his personnel) shall be PAT tested by the <i>TA</i> prior to mobilisation. All equipment shall have valid PAT testing certification.</p>	<i>TA</i>
<u>Behaviour &amp; Discipline</u>		
Generally	<p>All personnel (both BAS and <i>TA</i>) shall adhere to the BAS Code of Conduct which can be found at;</p> <p><a href="https://www.bas.ac.uk/wp-content/uploads/2015/04/bas_code_of_conduct_-_polar_regions_v1_4_3.pdf">https://www.bas.ac.uk/wp-content/uploads/2015/04/bas_code_of_conduct_-_polar_regions_v1_4_3.pdf</a></p>	n/a
Discipline - generally	<p>The Station Leaders have ultimate responsibility and authority for all activities within their facility and associated areas, including discipline of ALL personnel (including those of the <i>TA</i>).</p> <p>The <i>TA</i> shall appoint one of his members of staff as the person responsible for all his staff present at any particular station. This individual shall answer to the Station Leader in relation to all disciplinary issues.</p> <p>Failure to adhere to the BAS policies “drugs and alcohol” and “Respect at Work” (see links above) shall result in disciplinary action which is conducted at the discretion of the relevant Station Leader, and may</p>	

Title	Detail	Cost Allocation
	lead to individuals being repatriated to the UK (see Non-Compassionate Repatriation).	TA
Discipline – legal	<p>Station Leaders and Ships Masters are sworn in as magistrates for British Antarctic Territory (BAT).</p> <p>All personnel shall be aware that whilst they are territorially outside the UK, UK law applies unless a specific alternative BAT statute is in force. Personnel may be prosecuted for any breach of the law as if they were in the UK and either extradited or referred to a higher court for trial. Anyone found in breach of UK / BAT law shall be removed from Station.</p>	<p>TA</p> <p>See Non-Compassionate Repatriation</p>
<u>Repatriation</u>		
Compassionate repatriation.	<p>In circumstances whereby the TA's representative is to be repatriated because of compassionate events i.e. medical reasons resulting from work or unforeseeable conditions, death of immediate family etc, BAS shall arrange for the individual to be repatriated to the most appropriate Southern Gateway (i.e. Punta Arenas, Falkland Islands, Cape Town etc.) via the next available means (including non-BAS).</p> <p>BAS shall work with the TA's Welfare Support point of contact to facilitate onwards travel from the southern gateway to the UK, but shall be arranged by the TA.</p> <p>The cost of the repatriation to the southern gateway shall initially be covered by BAS, but this shall be recovered via the TA's insurances; the full cost must be recoverable by the TA's insurance policies.</p>	TA (insurances)
Non-Compassionate Repatriation	<p>In circumstances where the TA's representative is to be repatriated as a result of disciplinary offences or medical reasons which were foreseeable or avoidable, BAS shall arrange for transportation to the nearest Southern Gateway only and shall seek to recuperate ALL costs associated with the repatriation of the individual. This cost shall include transport, time costs for arrangements, costs for accommodation between disciplinary action and departure etc.</p> <p>The TA shall note that the costs associated with repatriation, especially during the Austral Winter, are exceptionally high, i.e. can be expected to exceed</p>	TA

Title	Detail	Cost Allocation
	£100,000. This must be considered when appointing personnel to mobilise.	
POST-DEPLOYMENT		
Publicity	<p>Any publicity in relation to specific projects shall be in line with the relevant Communications Plan.</p> <p>All material to be used externally must be submitted to BAS Communications Team (via the BAS Project Manager) for approval prior to use.</p>	TA

## **Annex D – Anticipated Technical Advisory Services**

The following provides an outline (non-exhaustive) of the range of support services it is anticipated that BAS shall require from the *TA* during the Framework Agreement:

### **D1 Project Management Support**

- Project Management
- Risk Management,
- Value Engineering and Management,
- Project Planning,
- Quality Management,
- Performance Measurement,
- Design Management and
- Site Supervision and Control.

### **D2 Professional and Technical Support**

- Acoustic Engineering
- Architectural,
- Asset Management,
- Building Conservation,
- Building Control,
- Building Services
- Building Information Modelling / CAD,
- Civil Engineering,
- Contract and Commercial,
- Construction Economy,
- Cost Consultancy / Quantity Surveying,
- Data Acquisition and Data management.
- Ecology,
- Electrical Engineering,
- Energy Conservation and Master Planning,
- Environmental Impact Assessment and Advice,
- Facility Management Advice,
- Fire Engineering,
- Forensic Claims Advice,
- Geology,
- Geotechnical Engineering,

- Health and Safety,
- Instrumentation , Control and Automation Engineering,
- Logistics Planning,
- Marine Engineering,
- Mechanical Engineering,
- Petro-chemical Engineering,
- Plumbing and drainage
- Polar Engineering (including snow modelling, ice loading etc.)
- Site Investigation and Surveys (planning, procurement and supervision),
- Sustainability Engineering (inc. Sustainability Appraisals i.e. CEEQUAL or similar),
- Structural Engineering,
- Town planning and
- Valuations.

## Annex E – NEC Project Manager Role Allocations

NEC Cls	Description	Client	TA	Comments
10.2	Spirit of mutual trust & co-operations	Y	Y	This is a fundamental aspect of the NEC4 contracts and all parties must adopt.
13.4	Replies to communication submitted by Construction Partner	Y	(Y) <sup>4</sup>	TA to provide advice to <i>Client</i> .
13.6	Issue certificates to Construction Partner	Y	(Y)	TA to provide advice to <i>Client</i> .
15.1	Issue early warnings	Y	Y	
16.1	Construction Partner's proposals to change scope	Y	(Y)	TA to provide advice to <i>Client</i> .
17.1	Give notice of ambiguity or inconsistency in / between contract documents	Y	Y	
19	Construction Partner's task orders	Y	(Y)	TA to provide advice to <i>Client</i> .
21.1	Review and accept Construction Partner's Design	Y	(Y)	TA to provide advice to <i>Client</i> .
22.1	Review key personnel for acceptance	Y	(Y)	TA to provide advice to <i>Client</i> .
24.2	Accept proposed [Construction Partner's] sub-contractors	Y	(Y)	TA to provide advice to <i>Client</i> .
30.2	Decide the date for completion	Y	(Y)	TA to provide advice to <i>Client</i> .
31.3	Accept Construction Partner's programme	Y	(Y)	TA to provide advice to <i>Client</i> .
50.1	Assess the amount due at the end of each assessment interval	Y	(Y)	TA to provide advice to <i>Client</i> .
51.1	To certify payment within 1 week of assessment date.	Y	(Y)	TA to provide advice to <i>Client</i> .
61.1	Notify the Construction Partner of compensation events which arise from the Project Manager	Y	(Y)	TA to provide advice to <i>Client</i> .
61.4	To decide if an event notified by the Construction Partner is a compensation event	Y	(Y)	TA to provide advice to <i>Client</i> .
61.5	To decide if the Construction Partner did / did not give early warning	Y	(Y)	TA to provide advice to <i>Client</i> .

<sup>4</sup> (Y) denotes an advisory role to the *Client*.

<b>NEC Cls</b>	<b>Description</b>	<b>Client</b>	<b>TA</b>	<b>Comments</b>
62.3	Reply within 2 weeks of Construction Partner submitting quotes for Compensation Events.	Y	(Y)	TA to provide advice to <i>Client</i> .
62.4	To advise the Construction Partner to submit a revised quotation	Y	(Y)	TA to provide advice to <i>Client</i> .
62.5	To extend the time allowed for the Construction Partner to submit quotes or for the Project Manager to reply to a quote.	Y		
63	Assess Compensation Events	Y	(Y)	TA to provide advice to <i>Client</i> .
86.1	Submit policies and certificates for insurances provided by <i>Client</i> to the Construction Partner	Y		

# Annex F - Framework Organogram

