

IUS CONSOLIDATED CONTRACT SCHEDULE

CONSOLIDATED SCHEDULE 3
SERVICE REQUIREMENTS AND CONTRACTOR SERVICE
DESCRIPTIONS

for Contract Number DCNS/119

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CONSOLIDATED SCHEDULE 3

SERVICE REQUIREMENTS AND CONTRACTOR SERVICE DESCRIPTIONS

This Consolidated Schedule describes the Services to be provided by the Contractor to the Customer Authority in accordance with the terms of this Consolidated Contract.

Capitalised terms used but not defined in this Consolidated Schedule are defined in Consolidated Schedule 1 (*Definitions*).

1 INTRODUCTION

1.1 This Consolidated Schedule sets out:

1.1.1 in PART A, the Customer Authority's Service Requirements; and

1.1.2 in PART B, the Contractor Service Descriptions,

which together form part of the Services.

1.2 The Contractor Service Descriptions as set out at Part B of this Consolidated Schedule 3 (*Service Requirements and Contractor Service Descriptions*) shall be interpreted in accordance with the following principles:

1.2.1 Part A shall take precedence over Part B and the Contractor Service Descriptions shall be interpreted in accordance with their corresponding Service Requirements;

1.2.2 the Contractor shall be obliged to provide the Services, carry out the activities and provide the approaches set out in Part B, notwithstanding the fact that terms such as "the Contractor shall" and "by the Contractor" are not used;

1.2.3 unless the context requires otherwise, capitalised terms in Part B which have not been defined shall, where a similar term exists in Consolidated Schedule 1 (*Definitions*), be interpreted in accordance with the similar defined term in Consolidated Schedule 1 (*Definitions*). If there is any ambiguity around the interpretation of capitalised terms in Part B that have not been defined, the Customer Authority shall be entitled to define such capitalised terms in its sole discretion and the Contractor shall accept such Customer Authority definitions;

1.2.4 in accordance with Clause 36.5 of this Consolidated Contract, any activities, tasks or other items described in Part B as being provided by the Customer Authority or being needed from the Customer Authority shall neither be: (i) obligations of the Customer Authority; nor (ii) Customer Authority Dependencies except to the extent expressly stated to be Customer Authority Dependencies in Consolidated Schedule 8 (*Customer Authority Dependencies*). There shall be no obligation on the Customer Authority to provide any advice or assistance to the Contractor save as set out in Consolidated Schedule 8 (*Customer Authority Dependencies*). No failure by the Customer Authority to perform or provide any such activities, tasks or other items shall relieve the Contractor of its obligations to deliver the Services or to fulfil any of its obligations under this Consolidated Contract; and

1.2.5 no statements made in Part B about comprehensiveness, ability or quality (whether of the Contractor or of the measures set out in Part B) shall be read as statements that have been approved or accepted by the Customer Authority.

PART A: SERVICE REQUIREMENTS

2 OVERVIEW

2.1 This Part A of this Consolidated Schedule sets out the Customer Authority's Service Requirements as follows:

2.1.1 the common requirements described in Paragraph 3 below;

2.1.2 the service management requirements described in Paragraph 4 below;

2.1.3 the technical requirements, including:

- (i) the Fixed Voice Service described in Paragraph 5 below;
- (ii) the Conferencing Service described in Paragraph 6 below;
- (iii) the Operator Assistance Service described in Paragraph 7 below;
- (iv) the Boundary Protection Service described in Paragraph 8 below;
- (v) the Mobile Voice and Data Service described in Paragraph 9 below;
- (vi) the Encryption Service described in Paragraph 10 below; and
- (vii) the Professional Services described in Paragraph 11 below.

3 COMMON REQUIREMENTS

General

- 3.1** The Contractor shall ensure that it is PSN Compliant during the Term.

Common Service Requirements

- 3.2** The Contractor shall, on instruction by the Customer Authority, promptly (or within such other timeframe communicated to it by the Customer Authority) disconnect any designated traffic flow for all or part of the Services and reinstate disconnected Services, in accordance with Clause 39.8 of this Consolidated Contract.

- 3.3** The Contractor shall, except as expressly stated to the contrary in this Consolidated Contract, proactively monitor and manage the Services, including by:

3.3.1 providing a system for monitoring and administering the Services;

3.3.2 deploying network management tools to enable:

- (i) provisioning, modification and cessation of the Services remotely;
- (ii) detection and rectification of Service Failures; and
- (iii) proactive network monitoring of all Services on a twenty-four (24) hours per day, seven (7) days a week, three hundred and sixty five (365) days per year basis;

3.3.3 ensuring that all Contractor Personnel who are responsible for network management and have access rights that allow them to amend the configuration of more than one Service have Developed Vetting Clearance;

3.3.4 ensuring that the network monitoring and management system satisfies the Customer Authority's Business Continuity requirements (as set out in Consolidated Schedule 22 (*Business Continuity and Disaster Recovery Provisions*)), so that:

- (i) in the event of any failure of the primary network monitoring and management system:
 - (a) an alternative (or fall-back) network monitoring and management system is available for the affected Service; and
 - (b) the personnel required to operate the alternative (or fall-back) network monitoring and management system are transferred by the Contractor as soon as reasonably practicable to the alternative Site on which such system is located in order to operate such system; and
- (ii) the risk of losing both the primary and fall-back network monitoring and management systems from a single failure or Incident is negligible; and

3.3.5 providing separate network monitoring and management for all TOP SECRET Services.

- 3.4** The Contractor shall support the management of Service and technical interfaces between the services and technology, communications and infrastructure systems provided by Customer Authority Third Parties to the Customer Authority, including by developing and

maintaining interface control documents in a format agreed in writing between the Parties, such form of writing to refer to this Paragraph 3.4.

3.5 The Contractor shall ensure that its solution for the provision of the Services shall be designed, and shall be scalable, in such a way as to ensure that the Services are capable of meeting, as a minimum, the as is geographical footprint and volumes set out in the Service Evaluation Model, as well as handling organic growth.

3.6 The Contractor shall advise the Customer Authority promptly, and in any event prior to the commencement of work, if it believes that:

3.6.1 a suite of Service Elements (whether combined with other Service Elements or not) requested by the Customer Authority is (or are as the case may be) unlikely to be capable of providing the outcome desired by the Customer Authority once commissioned; or

3.6.2 if there is a better value for money solution to meet the Customer Authority's requirements,

and in such circumstances, the Contractor shall identify to the Customer Authority (giving reasons) how the Customer Authority's Service Request may be amended in order to facilitate a successful outcome.

3.7 The Contractor shall ensure that all Services of a critical nature at a Customer Authority Site are provisioned with:

3.7.1 power requirements appropriate to supporting that critical Service (for example, uninterruptible power supply, battery back-up or dual feeds); and

3.7.2 the capability to fully utilise any resilient WAN services,
at that Customer Authority Site.

3.8 Without prejudice to its obligations under the ISS ITIL Processes and Consolidated Schedule 16 (*Contract Change Procedure*), the Contractor shall:

3.8.1 act as the Installation Design Authority for the Services in accordance with the Standards;

3.8.2 for each Customer Authority Site, engage proactively with, and abide by the decisions made by, the Customer Authority nominees who represent CIDA and SCIDA (and their successors) in respect of that Customer Authority Site; and

3.8.3 comply with the appropriate HSE Construction (Design and Management) Regulations 2007.

Equipment Management

3.9 The Contractor shall be responsible for ensuring that all Equipment is, and continues to be, sufficient and suitable for delivery of the Services in accordance with this Consolidated Contract, including in accordance with the Service Levels and the Standards.

3.10 Except where expressly stated to the contrary in Consolidated Schedule 8 (*Customer Authority Dependencies*), the Contractor shall manage all matters connected with the lifecycle of all Equipment, including the specification, procurement, construction, installation, commissioning, testing, operation, monitoring, maintenance, support, use, repair, modification, upgrade, refresh, replacement, decommissioning, storage, disposal

and recycling of all Equipment. Without prejudice to the generality of the foregoing, the Contractor shall:

- 3.10.1 proactively liaise with the Customer Authority with respect to the purchase of New Exclusive Equipment in accordance with the Procurement Plan, the Technology Refresh Plan and Clause 11 (*Equipment*) of this Consolidated Contract, and implement Equipment marking, control and inventory management and tracking methodologies, in accordance with Good Industry Practice;
- 3.10.2 ensure that it holds, manages and controls the distribution of an appropriate pool (or pools, as the case may be) of spare Equipment (the “**Spares Pool**”), including any spare Customer Authority Equipment that the Contractor believes is appropriate (including any equipment required in relation to Customer Authority Equipment purchased by the Customer Authority from Outgoing Service Providers). The Contractor shall not be entitled, unless otherwise agreed in advance in writing with the Customer Authority, such form of writing to refer to this Paragraph 3.10.2, to house spare Equipment on Customer Authority Premises;
- 3.10.3 where an item of Customer Authority Equipment is faulty, identify any relevant warranty protection, and progress claims under any such warranty expeditiously with a view to obtaining a repair or replacement of the relevant item or component at no additional charge to the Customer Authority;
- 3.10.4 where an item of Customer Authority Equipment is faulty and such fault(s) are (or are likely to) impact the provision or receipt of the Services adversely, fix or replace such item or component. Any Charges (if any) for such replacement item or component shall be handled in accordance with Consolidated Schedule 9 (*Charges and Invoicing*); and
- 3.10.5 from time to time decommission, de-install and remove Equipment that is no longer required to be installed on the Customer Authority Premises (including pursuant to MACs), unless directed otherwise by the Customer Authority. The Contractor shall determine whether such Equipment shall be put back into the Spares Pool or destroyed. Prior to destroying any Customer Authority Equipment, the Contractor shall confirm with the Customer Authority whether the Customer Authority requires the Contractor to:
 - (i) return such Customer Authority Equipment to the Customer Authority or its nominee at a location in the UK; or
 - (ii) dispose of such Customer Authority Equipment itself and in accordance with the Standards.
- 3.11 The Contractor shall ensure that, at the end of the Initial Term (or upon the termination or Partial Termination of this Consolidated Contract, if earlier), each item of Customer Authority Equipment is capable of supporting the Services (or any Replacement Services) for a further eighteen (18) months. This Paragraph 3.11 shall not serve to relieve the Contractor of its obligations to provide the Services in accordance with this Consolidated Contract.
- 3.12 Without prejudice to the Customer Authority's entitlement to vary its actual throughput (including as against the Service Evaluation Model) from time to time, the Contractor shall provide a solution for the Services, and plan the Implementation, so that once Milestone number 19 : *Overall Implementation Acceptance Date* has been Achieved:

- 3.12.1 ninety-five per cent. (95%) of the total volume of each Service Element relating to Voice Ports (excluding any Service Elements relating to Direct Exchange Lines) are delivered through IP telephony (the “**IP Telephony Volumes**”);
 - 3.12.2 eighty per cent. (80%) of the IP Telephony Volumes is delivered via soft phones that are integrated with the Customer Authority’s desktop information and infrastructure services platform (currently known as *DII*) and are delivered using the Microsoft Lync client;
 - 3.12.3 twenty per cent. (20%) of the IP Telephony Volumes is delivered via hard phones; and
 - 3.12.4 eighty-five per cent. (85%) of all Conference Instances shall be delivered utilising on-Net connectivity. For the purposes of this Paragraph 3.12.4, “**on-Net connectivity**” means connectivity provided to the Customer Authority by the Connectivity Tower Contractor.
- 3.13 The Contractor shall ensure that the percentages set out in Paragraph 3.12 above are delivered across all Security Classifications and:
- 3.13.1 for the Fixed Voice Service, in all Fixed Voice Subscriber Domains; and
 - 3.13.2 for the Conferencing Service, in all Conference Subscriber Domains.

4 SERVICE MANAGEMENT REQUIREMENTS

- 4.1 The Contractor shall provide Service Management from the Milestone Date for Milestone number 2: *Key Milestone, Service Management Established*.
- 4.2 In providing Service Management, the Contractor shall:
- 4.2.1 operate its own service management processes, in accordance with Good Industry Practice, the Service Management Framework and the ISS ITIL Processes;
 - 4.2.2 provide all of the obligations, interfaces, activities and inputs (including data and physical inputs) set out in the ISS ITIL Processes as being carried out by the entity referred to in them as the ‘*MSP*’;
 - 4.2.3 provide the Contractor Service Desk;
 - 4.2.4 provide the Key Service Design Plans in relation to each Service to the Customer Authority, in accordance with the ISS ITIL Processes;
 - 4.2.5 deliver the list of Event Management Thresholds to the Customer Authority, in accordance with the ISS ITIL Processes;
 - 4.2.6 provide, to the reasonable satisfaction of the Customer Authority, an initial set of Knowledge Articles in order to establish a base knowledge store for the Customer Authority and update the Knowledge Articles on an on-going basis as required by the ISS ITIL Processes;
 - 4.2.7 provide, to the reasonable satisfaction of the Customer Authority, the Definitive Media Library and update the Definitive Media Library on an on-going basis;
 - 4.2.8 exchange Management Information and operational service management information electronically with the Customer Authority and Customer Authority Third Parties in near real time and in a format compatible with any Customer Authority

OSM Service Management Tooling (the “**Management Information Exchange**”). In particular, the Contractor shall ensure that Customer Authority Authorised Users have access to a range of functions, including:

- (i) access to Management Information, including Reports, Monthly Summaries, and information regarding capacity, usage, Incidents and Problems;
- (ii) the ability to raise Incidents and monitor the progress of Incident Resolution;
- (iii) the ability to call off Services from the Contractor’s Call-Off Service Catalogue; and
- (iv) access to service bulletins and other information notices; and

4.2.9 present data to the Customer Authority that complies with the minimum data sets listed in the ISS ITIL Processes.

4.3 The Contractor shall provide at least one (1) member of the Contractor Personnel to act as a direct liaison for the GOSCC (such personnel being known as the “**GOSCC Liaison**”). A member of GOSCC Liaison shall:

4.3.1 during Working Hours be located within the GOSCC; and

4.3.2 at all other times outside of Working Hours (three hundred and sixty five (365) days a year) be available to attend the GOSCC on request.

4.4 Each member of the GOSCC Liaison shall have appropriate authority within the GOSCC to facilitate the resolution of Major Incidents between the Contractor Service Desk and any other service desks involved in the provision of information, communications or technology services to the Customer Authority (whether such other service desks are managed and operated by the Customer Authority or a Customer Authority Third Party). The Contractor shall ensure that the GOSCC Liaison shall respond to Incidents that are raised outside the normal Working Hours of the Customer Authority Site on which the GOSCC is located as follows:

4.4.1 by telephone or email , promptly upon the Customer Authority raising the relevant Incident by sending an email or making a telephone call to the GOSCC Liaison; and

4.4.2 if the GOSCC Liaison is required to attend the GOSCC in person in order to resolve the Incident, the GOSCC Liaison shall attend the GOSCC within two (2) hours of the Customer Authority raising the relevant Incident by sending an email or making a telephone call to the GOSCC Liaison.

4.5 The Contractor shall ensure that the GOSCC Liaison fulfils all of the requirements for, and functions of, the GOSCC Liaison set out in the ISS ITIL Processes. The Contractor shall further ensure that the GOSCC Liaison:

4.5.1 is appropriately empowered and has responsibility and authority over the Contractor’s services operation and prioritisation;

4.5.2 works collaboratively with its Sub-contractors, Customer Authority Third Parties and the Customer Authority in order to expedite the resolution of Service Outages, Major Incidents and Problems;

- 4.5.3 proactively contributes to Service planning; and
- 4.5.4 supports the delivery and management of the Services effectively.

5 FIXED VOICE SERVICE

5.1 Fixed Voice Service Overview

5.1.1 In providing the Fixed Voice Service, the Contractor shall:

- (i) provide the Fixed Voice Core Service;
- (ii) provide the Fixed Voice Site Service;
- (iii) provide the DCMC Capability;
- (iv) provide the HMNB Clyde Emergency Alert Capability;
- (v) provide the Third Party Access Service;
- (vi) deliver the Public Access Services; and
- (vii) carry out certain MACs,

each as more particularly described in the remainder of this Paragraph 5.

5.1.2 The Contractor shall ensure that:

- (i) the Fixed Voice Service (unless expressly stated to the contrary in this Consolidated Schedule in respect of a particular aspect of such Service or period during which such Service is provided) supports calls carrying audio at OFFICIAL, SECRET and TOP SECRET; and
- (ii) the Public Access Services are delivered at Unclassified only.

5.1.3 The Contractor shall, at the Customer Authority's request, install, maintain and support the Fixed Voice Site Service for all Customer Authority Sites, End User Devices and End Users customarily located (or to be located) at the following fixed voice Subscriber Domains:

- (i) "UK", where the Site, End User Device or End User is (or is to be) located within the United Kingdom;
- (ii) "Overseas (Type A)", where the Site, End User Device or End User is (or is to be) located within Germany or Cyprus; and
- (iii) "Overseas (Type B)", where the Site, End User Device or End User is (or is to be) located within the United States of America or Canada,

(each a "Fixed Voice Subscriber Domain").

5.1.4 The Contractor shall provide the Fixed Voice Service twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty five (365) days a year.

5.2 Fixed Voice Core Service

5.2.1 The "Fixed Voice Core Service" means the Core Voice Capability, Call Logging, the ACD Service, the Single Number Reach Capability, the provision of Voice User Accounts, the Group Voice Service, the Voicemail Service, the Auto-attendant Service and the Audio Conferencing Capability taken together.

5.2.2 From the relevant Operational Service Commencement Date, the Contractor shall provide the Fixed Voice Core Service, so that it supports Audio Calls to and from any Fixed Voice Subscriber Domain. The Fixed Voice Core Service shall be hosted from the UK unless otherwise agreed in writing with the Customer Authority, such form of writing to refer to this Paragraph 5.2.

5.2.3 In delivering the Fixed Voice Core Service, the Contractor shall:

- (i) maintain the Customer Authority Numbering Plan in line with the Standards, including use of Emergency Calls as defined in the existing Customer Authority Numbering Plan;
- (ii) ensure that the Core Voice Capability is seamlessly integrated with the Boundary Protection Service so that the operation of the Boundary Protection Service is invisible to the End User; and
- (iii) register all telephone numbers assigned to, and used by, the Customer Authority (including Direct Dial In and Direct Exchange Line with the Telephone Preference Service and any other similar central opt out registers through which individuals or organisations can register their wish not to receive unsolicited sales and marketing telephone calls.

5.2.4 Core Voice Capability. The Contractor shall:

- (i) provide a private voice network to the Customer Authority (to be delivered exclusively within the GCN and PSN domains) (the “**Closed Network**”) to which any End User located within any Fixed Voice Subscriber Domain can connect in order to make and receive successful Audio Calls;
- (ii) ensure that the Fixed Voice Service is designed and implemented so as to ensure that the failure of the Core Voice Capability in one country does not automatically trigger a failure of the Fixed Voice Service in another country;
- (iii) ensure that calls made from the Fixed Voice Service are implemented with the least cost routing, to ensure that either:
 - (a) calls are completed entirely within the Closed Network, as far as practicable; or
 - (b) in the event it is not possible to complete a call entirely within the Closed Network, that the relevant call is routed through the lowest cost route readily available to the Contractor;
- (iv) provide the following service components:

Service Component	Outline Description of Service Component
Call Barring	The ability for the Customer Authority to block incoming or outgoing calls either by a single End User or groups of End Users.
Multi Level Security	Provide End Users with architectural or audible confirmation that their Audio Call is connected and completed at the appropriate Security Classification.
End User Profiles	The Contractor shall configure and assign a profile to each End User that correctly applies the Calling

	<p>Permissions and the Calling Features that the Customer Authority chooses from time to time for an End User or types of End Users (each an “End User Profile”). All End User Profiles will allow each End User to make one (1) or more of the following call types:</p> <ul style="list-style-type: none"> • calls completed entirely within the Closed Network; • UK local rate and national rate calls (excluding local rate and national rate calls to Non-geographic numbers), through the use of the Boundary Protection Service; • international calls, through the use of the Boundary Protection Service; • premium rate numbers (excluding 118xxx numbers), through the use of the Boundary Protection Service; • calls to Non-geographic numbers, through the use of the Boundary Protection Service; and • 118xxx numbers, through the use of the Boundary Protection Service.
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Table 1 – Core Voice Capability – Service Components

and

- (v) provide the following core set of features as part of the Core Voice Capability:

Feature	Outline Description of Feature
Call Back	An End User receiving a busy indication (i.e. an audible tone) or no reply, can request an automatic call back when the busy destination clears.
Call Busy	An End User receives an indication (i.e. an audible tone) that the destination is busy.
Call Diversion (Pull)	Automated diversion of an incoming call to an End User's current device/location.
Call Forwarding	Automated forwarding of all incoming calls to a specified destination, or specified destination if the line is busy, or specified destination if there is no answer. The End User shall have the ability to specify such destination in a user-friendly manner.
Call Hold	Allows an End User to place a call on hold (a “ Held Call ”), with a holding indication given to the caller.

Call Hunt Group	Incoming calls ring the first idle destination defined as being within the relevant hunt group (such hunt group to be specified by the End User). In addition, specific destinations within a hunt group can be called using a unique identifier (e.g. extension number).
Call Line ID	The ability for all End User numbers to be withheld when making calls to the External Network unless expressly stated otherwise.
Call Number Display	For calls made within the Closed Network, displays the number of the End User or other caller making the incoming call on the End User's handset (where the handset type used by the relevant End User accommodates a call number display function).
Call Pick Up	Allows an End User to answer a call made to another End User's telephone, using that first End User's telephone.
Call Transfer	Allows an End User to switch an incoming call to another destination in the Fixed Voice Service and to switch back to that incoming call if the intended transfer destination is busy or not answering.
Call Waiting	A busy End User receives an indication (i.e. an audible tone) that another call is incoming and can then: (i) clear the current call; (ii) put the current call on hold to accept the incoming call; or (iii) reject or ignore the incoming call.
Call Third Parties	Allows the End User to make an enquiry call to another number (" Enquiry Call ") whilst having an existing Held Call. The Enquiry Call can then either: <ul style="list-style-type: none"> (i) be terminated by the End User; or (ii) the End User can switch between the Held Call and the Enquiry Call; or (iii) the End User can connect the Enquiry Call to the Held Call and exit; or (iv) the End User can connect the Enquiry Call to the Held Call without exiting, creating an Audio Conference Call between the End User, and the people making the Enquiry Call and the Held Call.
Shortened Code Dialling	Establishes dialling codes in accordance with the Customer Authority Numbering Plan.

Table 2 – Core Voice Capability – Service Features

The services described in this Paragraph 5.2.4, when taken together, shall be known as the “**Core Voice Capability**”.

5.2.5 Call Logging The Contractor shall provide the Customer Authority with:

- (i) the ability to track call logging data; and
- (ii) the information set out in Consolidated Schedule 14 (*Performance Monitoring and Reporting*).

The services described in this Paragraph 5.2.5, when taken together, shall be known as “**Call Logging**”.

5.2.6 ACD Service (to be provided at OFFICIAL only).

- (i) The Contractor shall provide the Customer Authority with an Automatic Call Distribution service for use at OFFICIAL to facilitate the handling of large volumes of incoming calls, predominantly for use in contact centres. The provision of this service shall also include the design, development and implementation of ACD solutions. The ACD solutions shall:
 - (a) include telephony provision, call routing flow design, digital call recording and management information systems including wallboards;
 - (b) be configurable by the Customer Authority. Such configuration is to be agreed with the Customer Authority for each ACD but shall include, as a minimum, reconfiguration of the call routing menu to reflect changes in routing extensions or name changes;
 - (c) include training on the ACD solution that shall, as a minimum, incorporate:
 - (I) administrator training;
 - (II) supervisor training;
 - (III) on site agent training;
 - (IV) management information system training;
 - (V) call recording training; and
 - (VI) floor walking to provide training for End Users for ‘go live’ of new systems.
- (ii) For ACD solutions existing at the Operational Service Commencement Date for the ACD Service, the Contractor shall perform the obligations set out in Paragraph 5.2.6(i) above. Where, during Transition, the Contractor is unable to repair faulty Equipment used to provide the relevant existing ACD solution, the Contractor shall liaise with the Customer Authority and, at the Customer Authority’s request, shall migrate such ACD solution to the Contractor’s most appropriate ACD solution.

The services described in this Paragraph 5.2.6, when taken together, shall be known as the “**ACD Service**”.

5.2.7 Single Number Reach Capability (to be provided at OFFICIAL only). The Contractor shall provide the Customer Authority with the ability to assign specified End Users with a single number reach account (each a “**Single Number Reach Account**”). A Single Number Reach Account will provide the specified End User with the ability via an End User Device or online portal integrated with the Closed Network to route calls to an End User specified end-point destination, such as a Fixed Voice Service extension, a public telephone extension, a mobile extension, or a voicemail.

The services described in this Paragraph 5.2.7, when taken together, shall be known as the “**Single Number Reach Capability**”.

5.2.8 Voice User Accounts. The Contractor shall provide the Customer Authority with the ability to assign specified End Users a voice account which can be logged into from all compatible devices that are connected to the Core Voice Capability (each a “**Voice User Account**”):

- (i) at TOP SECRET during any period of Transition and Migration of a Voice User Account; and
- (ii) at OFFICIAL, SECRET and TOP SECRET following Migration of a Voice User Account.

5.2.9 Group Voice Service (to be provided at OFFICIAL only). The Contractor shall provide a group voice service for use at OFFICIAL, whereby incoming calls to a specified extension ring all idle destinations defined as being within a specific group of destinations (each a “**Voice Service Group**”), and the call connects to the first destination to answer the call (together, the “**Group Voice Service**”).

5.2.10 Voicemail Service. The Contractor shall provide specified End Users and Voice Service Groups with a voicemail account (each a “**Voicemail Service Account**”) which:

- (i) enables a caller to record a message when the destination does not answer a call after a specified number of rings or is busy;
- (ii) indicates to the End User that a new Voicemail has been received;
- (iii) enables an End User to retrieve such message from within the Closed Network and, in relation to messages transmitted at OFFICIAL only, to retrieve such messages externally;
- (iv) enables an End User to send and receive voice messages directly to other End Users without having to make a call to that End User; and
- (v) enable Voicemails to be held for a period of thirty (30) days unless saved by the End User for long term storage.

The services described in this Paragraph 5.2.10, when taken together, shall be known as the “**Voicemail Service**”.

5.2.11 The Contractor shall provide the Voicemail Service:

- (i) at OFFICIAL and TOP SECRET during any period of Transition and Migration of a Voicemail Service Account; and

- (ii) at OFFICIAL, SECRET and TOP SECRET following Migration of a Voicemail Service Account.

5.2.12 Auto-attendant Service (to be provided at OFFICIAL only). The Contractor shall provide the Customer Authority with the ability to offer End Users and other callers calling telephone numbers specified by the Customer Authority (each an “**Auto-attendant Number**”), a menu of options for the routing of calls to Customer Authority specified destinations (such menu to be, as a minimum, reconfigurable by the Customer Authority to reflect changes in routing extensions or name changes). The Contractor shall ensure that calls to an Auto-attendant Number are routed in accordance with the End User’s or other caller’s selections.

The services described in this Paragraph 5.2.12, when taken together, shall be known as the “**Auto-attendant Service**”.

5.2.13 Audio Conferencing Capability. The Contractor shall:

- (i) provide certain End Users as specified by the Customer Authority from time to time with an individual account enabling the holder to successfully initiate, set up, participate in and cease Audio Conference Calls from time to time (an “**Audio Conferencing Account**”);
- (ii) subject to (iii) below, enable all callers to participate in such Audio Conference Calls; and
- (iii) provide each Audio Conferencing Account holder setting up an Audio Conference Call with the ability to restrict access to such Audio Conference Call to:
 - (a) End Users within the Closed Network and;
 - (b) other callers from External Networks where access is provided at the required Security Classification through the Boundary Protection Service,

together, the “**Audio Conferencing Capability**”.

The Contractor shall provide the hosted Audio Conferencing Capability:

- (i) at OFFICIAL and SECRET during any period of Transition and Migration of an Audio Conferencing Account; and
- (ii) at OFFICIAL, SECRET AND TOP SECRET following Migration of an Audio Conferencing Account.

5.3 Fixed Voice Site Service

From the relevant Operational Service Commencement Date, the Contractor shall enable any End User located within any Fixed Voice Subscriber Domain to make and receive successful Audio Calls in accordance with the remainder of this Paragraph 5.3 (the “**Fixed Voice Site Service**”).

5.3.1 The Contractor shall:

- (i) maintain Fixed Voice Equipment already installed as at the relevant Operational Service Commencement Date in support of the delivery of the Fixed Voice Service; and

- (ii) install, commission and maintain Fixed Voice Equipment at any Customer Authority Site in respect of which they are requested by the Customer Authority from time to time (each site being a “**Fixed Voice Customer Authority Site**”), whether such Customer Authority Site is ‘very small’, ‘small’, ‘medium’, ‘large’, or ‘very large’ in size (each a “**Site Size Band**”);
- (iii) actively monitor the Fixed Voice Equipment being used at each Fixed Voice Customer Authority Site and, by agreement with the Customer Authority, rationalise such Fixed Voice Equipment to deliver the Fixed Voice Site Service through the most efficient and effective Site Size Band for that particular Fixed Voice Customer Authority Site; and

5.3.2 In delivering the Fixed Voice Site Service, the Contractor shall be responsible for connecting to the appropriate Customer Authority provisioned connectivity and the provision of any media converters required in the delivery of the Contractor’s solution, including:

- (i) analogue converters to support delivery of the IP technology over analogue cabling;
- (ii) Fibre Optic Line Extender (FOLE) to support the delivery of a feature-phone End User Device with fibre optic Site wiring; and
- (iii) Fibre Optic Line Driver (FOLD) to support the delivery of BRENT End User Devices when delivered over fibre optic Site wiring.

5.3.3 Voice Extensions. For each Customer Authority Site receiving the Fixed Voice Site Services described in the above and below parts of this Paragraph 5.3, and for so long as the Customer Authority requires, the Contractor shall:

- (i) as requested by the Customer Authority, provide voice extensions to provide access to the Fixed Voice Core Service. The Contractor shall make available one (1) voice extension for each End User Device. The Contractor shall provide a choice of the following port types, as a minimum, for delivery of each voice extension, using either time division multiplex (TDM) or IP technology voice ports (as requested by the Customer Authority):
 - (a) **TDM:**
 - (I) analogue;
 - (II) feature-rich to support telephones, typically to deliver features such as caller name display, call back, manager/secretary choices, etc.;
 - (III) I.420 (2B+D) to support the delivery of all variants of BRENT devices currently utilised across the Customer Authority estate; and
 - (b) **IP technology**
 - (I) IP fixed telephony; and
 - (II) IP soft voice to support integration with the MS Lync client to provide a collaborative working environment.

each a “**Voice Port**”;

- (ii) as requested by the Customer Authority from time to time, enable Voice Ports for the relevant End User Devices in order to allow End Users to make and receive successful Audio Calls;
- (iii) inform the Customer Authority in the event that the enablement of additional Voice Ports would place the relevant Customer Authority Site in a larger Site Size Band; and
- (iv) following completion of Migration in respect of the Fixed Voice Site Service, provide support for each Voice Port, in accordance with G711 Voice CODEC, as set out in the Standards.

5.3.4 End User Devices. The Contractor shall make available a range of End User Devices, in accordance with the following requirements:

- (i) as requested by the Customer Authority from time to time, the Contractor shall deliver, install and (other than in relation to an analogue Off the Shelf End User Device) maintain a range of End User Devices that correspond with the relevant Voice Ports to enable End Users to connect to the relevant Fixed Voice Equipment, including:
 - (a) Off the Shelf (including Secure-at-Rest and Push-to-Talk);
 - (b) feature-phone (including Secure-at-Rest and Push-to-Talk);
 - (c) head-sets;
 - (d) intrinsically safe/hazardous area to support delivery within Customer Authority fuel depot and ammunition locations where additional protective measures may be required; and
 - (e) weatherproof;
- (ii) each End User Device (excluding head-sets) made available by the Contractor shall include:
 - (a) a fitted display which indicates:
 - (I) dialled number;
 - (II) call duration;
 - (III) time of day;
 - (IV) number entered into or recalled from memory;
 - (b) a function which enables the End User to redial the last number dialled with a single button press;
 - (c) a function which enables the End User to mute the Audio Call with a single button press; and
 - (d) a socket to attach a separate headset; and
- (iii) as requested by the Customer Authority from time to time, the Contractor shall provide End User Devices (excluding head-sets) which are suitably protected to enable the Fixed Voice Service to be provided at the required Security Classification (each a **“Protected End User Device”**) and ensure that such Protected End User Devices:

- (a) are interoperable with the encrypted services provided by the Connectivity Tower Contractor;
- (b) are interoperable with the encryption key material obtained by the Contractor as part of the Encryption Services;
- (c) do not adversely impact on the availability or quality of any of the other services being provided to the Customer Authority.

5.3.5 Fixed Voice Site Infrastructure Service. Following completion of Migration for the Fixed Voice Site Service, at:

- (i) all Customer Authority Sites with a Site Size Band of “large” or “very large”; or
- (ii) as requested by the Customer Authority for any other Site with a different Site Size Band,

the Contractor shall, for OFFICIAL only, enable End Users to make and receive calls within the boundaries of the relevant Customer Authority Site irrespective of whether there is WAN connectivity at that Customer Authority Site.

5.3.6 Telephony Berthing Service (to be provided at OFFICIAL only). The Contractor shall provide any of Her Majesty’s or other ships or submarines berthed at:

- (i) HMNB Clyde;
- (ii) HMNB Devonport;
- (iii) HMNB Portsmouth; and
- (iv) any other Customer Authority dockyard as may be specified by the Customer Authority from time to time,

with the ability via a Voice Port to connect to the Core Voice Capability, at OFFICIAL only, for the duration of that ship’s or submarine’s berthing (the “**Telephony Berthing Service**”).

5.4 DCMC Capability. The Contractor shall ensure that the Fixed Voice Service is Available to the DCMC in the event of a lockdown of a specified Customer Authority Site (despite access to such Customer Authority Site for the Contractor Personnel not being possible in the event of such a lockdown). Without limitation to the foregoing, the Contractor shall deliver such telephony service through:

- 5.4.1** annual familiarisation training for a number of DCMC staff nominated by the Customer Authority, in order to familiarise such DCMC staff with all of the different types of Fixed Voice Equipment, so that such DCMC staff have the knowledge required to use and maintain such Fixed Voice Equipment throughout the lockdown;
- 5.4.2** additional remote support and knowledgeable guidance to the on-site DCMC staff where such staff have insufficient knowledge to rectify the relevant incident or fault; and
- 5.4.3** an on-site spares pack at the DCMC which contains spare equipment and parts that the Contractor Personnel would typically use to maintain or repair Fixed Voice Equipment located on the specified Customer Authority Site.

The Services described in this Paragraph 5.4, when taken together, shall be known as the **“DCMC Capability”**.

5.5 HMNB Clyde Emergency Alert Capability (to be provided at OFFICIAL only). The Contractor shall provide, at OFFICIAL only, a communications capability for HMNB Clyde to enable the Customer Authority in the event of an emergency to:

- 5.5.1 create and disseminate pre-recorded and ad-hoc public information to specified groups of recipients;
- 5.5.2 send automated text and voice messages to specified Customer Authority personnel required to respond to the emergency; and
- 5.5.3 track receipt and acknowledgement of calls, and produce a report detailing which messages were received and which messages were acknowledged,

together, the **“HMNB Clyde Emergency Alert Capability”**.

5.6 Third Party Access Service (to be provided at OFFICIAL only). As required by the Customer Authority from time to time, the Contractor shall provide third parties specified by the Customer Authority with the ability to connect to the Fixed Voice Service at OFFICIAL (the **“Third Party Access Service”**) to enable Audio Calls between the third party site and the Closed Network at OFFICIAL.

5.7 Public Access Services. The Contractor shall deliver, as requested by the Customer Authority from time to time, the following Unclassified public access telephony services to the Customer Authority:

- 5.7.1 **Non-geographic numbers.** As specified by the Customer Authority, assign telephone numbers to a specific location which have a set call charge regardless of the caller's location in the UK, i.e. toll-free, local rate, national rate and premium rate. This service will include the set-up of the Non-geographic number and the configuration of call delivery to the correct destination;
- 5.7.2 **Direct Dial In (DDI).** As specified by the Customer Authority, assign specific End Users with their own direct dial number accessible from the public switched telephone network (or the in-country equivalent for overseas locations); and
- 5.7.3 **Direct Exchange Line (DEL).** The provision of direct connectivity to the UK public switched telephone network (or the in-country equivalent for overseas locations) without traversing the Core Voice Capability or any other Customer Authority service infrastructure,

each a **“Public Access Service”**.

5.8 Provisioning. Where a Fixed Voice Service has been requested by the Customer Authority:

5.8.1 for **UK and Overseas (Type A)**, the Contractor shall:

- (i) undertake surveys of the relevant Customer Authority Site in order to complete the design documentation required for approval of the Fixed Voice Equipment delivery;
- (ii) deliver, install and commission the Fixed Voice Equipment at the relevant Customer Authority Site;

- (iii) apply the End User Profiles for each End User that the Customer Authority has specified in respect of Calling Permissions and Calling Features, and confirm the same to the Customer Authority in writing;
- (iv) on request by the Customer Authority's nominee, provide a member of the Contractor Personnel to guide the End User through the fault diagnostic procedure remotely and in real time; and
- (v) attend the relevant Customer Authority Site to repair or replace faulty Fixed Voice Equipment, at a time and date reasonably specified by the Customer Authority;

5.8.2 for Overseas (Type B), the Contractor shall:

- (i) if requested by the Customer Authority, undertake surveys of the relevant Customer Authority Site in order to complete the design documentation required for approval of the Fixed Voice Equipment delivery (such surveys shall be performed as Professional Services in accordance with the Rate Card);
- (ii) deliver the Fixed Voice Equipment to a nominated UK Customer Authority Site for onward transportation by the Customer Authority;
- (iii) if required, provide training to a Customer Authority nominee for the Customer Authority Site nominated for delivery under Paragraph 5.8.2(ii) above, which enables the Customer Authority nominee to install, commission, inter-connect, fault find and replace such Fixed Voice Equipment;
- (iv) at the same time as delivering the Fixed Voice Equipment to the UK Customer Authority Site nominated for delivery under Paragraph 5.8.2(ii) above, provide written installation instructions for that Fixed Voice Equipment;
- (v) provide operational familiarisation training to Customer Authority nominee(s), for the Customer Authority Site nominated for delivery under Paragraph 5.8.2(ii) above, which gives an overview of how the Fixed Voice Equipment delivered should be used and operated;
- (vi) on request by the Customer Authority nominee, provide a member of the Contractor Personnel to guide the Customer Authority nominee through the installation and commissioning of each item of Fixed Voice Equipment remotely and in real time, until the Customer Authority has been able to achieve a successful Audio Call using that Fixed Voice Equipment;
- (vii) apply the End User Profiles for each End User that the Customer Authority has specified in respect of Calling Permissions and Calling Features, and confirm the same to the Customer Authority in writing;
- (viii) provide handbooks and fault handling instructions to the Customer Authority's nominee;
- (ix) on request by the Customer Authority's nominee, provide a member of the Contractor Personnel to guide the End User through the fault diagnostic procedure remotely and in real time; and

- (x) collect faulty Fixed Voice Equipment from a nominated UK Customer Authority Site at a time and date reasonably specified by the Customer Authority (and at the same time as collecting the faulty Fixed Voice Equipment, deliver appropriate replacement Fixed Voice Equipment).

5.9 Closed User Groups

- 5.9.1 The Contractor shall, upon request by the Customer Authority, create Closed User Groups, which enable the End Users within the Closed User Groups to use the Fixed Voice Services to meet particular security or operational requirements.
- 5.9.2 From the relevant Operational Service Commencement Date, the Contractor shall maintain any existing Closed User Groups in place for fixed voice services immediately prior to the Operational Service Commencement Date, unless otherwise requested by the Customer Authority, including **TOP SECRET STRAP 2**, a Closed User Group which enables End Users at specified Customer Authority Sites to make and receive Audio Calls at TOP SECRET STRAP 2 Security Classification.

5.10 MACs

- 5.10.1 On request by the Customer Authority from time to time, the Contractor shall carry out the types of MACs shown in the table below (each a “**Fixed Voice Service MAC**”).
- 5.10.2 The activities to be carried out by the Contractor within each Fixed Voice Service MAC shall include any Site attendance, removal, de-installation, de-commissioning, configuration and administrative work required as a result of such Fixed Voice Service MAC, including equipment removal and amendments to the Customer Authority Numbering Plan and the information available through the Management Information Exchange.

MAC	Non-exhaustive list of activities included within the MAC
Remote/soft move or amendment	<ul style="list-style-type: none"> • All preparatory work, including design activities in validating a remote change or amendment requested by the Customer Authority (i.e. a change or amendment that is possible within the capability of the existing equipment and can be completed remotely without a change or amendment in hardware); • remote work to complete the change or amendment requested by the Customer Authority; and • any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Move or amendment - engineer visit required	<ul style="list-style-type: none"> • All preparatory work, including a Site survey (if required) and design activities; • carry out any MAC Approval Activities; and • once any MAC Approvals have been obtained, undertake activities required to fulfil the Customer

	<p>Authority MAC request; and</p> <ul style="list-style-type: none"> any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Complex move or amendment	<ul style="list-style-type: none"> All preparatory work, including a Site survey (if required) and design activities, and production of a costed proposal for the work involved; carry out any MAC Approval Activities; once any MAC Approvals have been obtained, undertake activities required in order to fulfil the Customer Authority MAC request; and any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Remote/soft cease	<ul style="list-style-type: none"> All preparatory work, including design activities in validating a remote cease requested by the Customer Authority (i.e. a cease that is possible within the capability of the existing equipment and can be completed remotely without a change or amendment in hardware); carry out all remote work to complete the cease requested by the Customer Authority and remove the appropriate service in accordance with Paragraph 3 of this Consolidated Schedule, while ensuring that any remaining Services are maintained; and any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Cease - engineer visit required	<ul style="list-style-type: none"> All preparatory work, including a Site survey (if required) and design activities; carry out any MAC Approval Activities; once any MAC Approvals have been obtained, all work necessary to de-commission, de-install and remove the appropriate service and all associated hardware in accordance with Paragraph 3 of this Consolidated Schedule, while ensuring that any remaining Services are maintained; and any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Complex cease	<ul style="list-style-type: none"> All preparatory work, including a Site survey (if required) to scope the proposed cease and production of a costed proposal for the work involved; carry out any MAC Approval Activities;

	<ul style="list-style-type: none"> once any MAC Approvals have been obtained, all work necessary to decommission, de-install and remove the appropriate service and all associated hardware in accordance with Paragraph 3 of this Consolidated Schedule, while ensuring that any remaining Services are maintained; and any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
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Table 3 – Fixed Voice Service MACs

6 CONFERENCING SERVICE

6.1 Conferencing Service Overview

6.1.1 In providing the Conferencing Service, the Contractor shall:

- (i) provide the Core Conferencing Service;
- (ii) provide the Conference Instance Services;
- (iii) provide the Conference Instance Types; and
- (iv) carry out certain MACs,

each as more particularly described in the remainder in this Paragraph 6.

6.1.2 The Contractor shall enable the Customer Authority to set-up and participate in successful point-to-point and multi-point voice and video conferences from and between individual Conference Instances using IP and ISDN connectivity (each such conference being a “**Conference Event**”).

6.1.3 The Contractor shall ensure that the Conferencing Service (unless expressly stated to the contrary in respect of a particular aspect of such Service in this Paragraph 6) supports Conference Events at OFFICIAL, SECRET and TOP SECRET.

6.1.4 The Contractor shall, at the Customer Authority’s request from time to time, install, maintain and support Conference Instances:

- (i) located (or to be located) at the following Subscriber Domains for the Conferencing Service:
 - (a) “**UK**”, where the Conference Instance is (or is to be located) within the United Kingdom;
 - (b) “**Overseas (Type A)**”, where the Conference Instance is (or is to be located) within Germany or Cyprus;
 - (c) “**Overseas (Type B)**”, where the Conference Instance is (or is to be located) within the United States of America or Canada;
 - (d) “**Overseas (Type C)**”, where the Conference Instance is (or is to be located) within a country that does not fall within the Overseas (Type A) or Overseas (Type B) categories referred to immediately above;
 - (e) “**Mobile**”, where the Conference Instance has (or is to have) no fixed location; and

- (f) **“Maritime Platforms”**, where the Conference Instance is (or is to be located) on one of Her Majesty’s ships or submarines,
- (each a **“Conference Subscriber Domain”**); and
- (ii) to which Conferencing Services are provided by the Contractor (as required by the Customer Authority from time to time),

as more particularly described in the remainder in this Paragraph 6.

6.1.5 The Contractor shall provide the Conferencing Service twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty five (365) days a year.

6.2 Core Conferencing Service

From the relevant Operational Service Commencement Date, the Contractor shall provide the following services from within the United Kingdom, in order to support Conference Events for all End Users within any Conference Subscriber Domain:

6.2.1 Service Centre Capability. This capability consists of the provision of a service centre (the **“Service Centre”**) that provides all End Users with an informed single point of contact for Conference Booking, Conference Management, Third Party Terminal Testing and Conference Training administration in accordance with Good Industry Practice. Without prejudice to Paragraph 6.2.1(i) below, the service centre capability shall be contactable via a toll-free telephone number. The service centre capability shall also include the provision and on-going management and support of the following:

- (i) **an access control list**, which accurately lists the End Users and Conference Instances that are authorised by the Customer Authority to use the Conferencing Services. The Contractor shall provide the personnel nominated by the Customer Authority from time to time with the ability to require the Contractor to revoke End User or Conference Instance access to the Conferencing Service from time to time. The Contractor shall promptly revoke relevant End Users’ or Conference Instance access as requested by such Customer Authority nominees from time to time; and
- (ii) **a conferencing directory**, which accurately lists all Conference Instances records for each Conference Instance and details of the business areas, Customer Authority Site, room and telephone number for each Conference Instance (the **“Conference Directory”**).

The Services described in this Paragraph 6.2.1, when taken together, shall be known as the **“Service Centre Capability”**.

6.2.2 Bridging Capability. The bridging capability consists of a conferencing bridge capability located in the United Kingdom that:

- (i) supports IP and ISDN connectivity;
- (ii) provides multi-point conferences for up to a maximum of thirty-eight (38) participants per Conference Event;
- (iii) authenticates point-to-point conferences without using bridge ports;
- (iv) enables any third party user (such user to have been notified to the Contractor by the Customer Authority as being an authorised third party

user) with video conferencing equipment to join a Conference Event via the Boundary Protection Service, provided that the Contractor has first:

- (a) successfully completed the Third Party Terminal Test of the relevant third party user's Conference Instance and confirmed that the relevant third party conference end-point is technically compatible for use with the bridging capability; and
 - (b) obtained each third party participant's signature to the Conferencing Service SyOPs and the Conferencing Service code of connection;
- (v) enables voice-only participants to join Conference Events, provided that the Contractor has first obtained each third party participant's signature to the Conferencing Service SyOPs and Conferencing Service code of connection. The Contractor shall ensure that:
- (a) each time that a voice-only participant joins a Conference Event, there is a notification to alert other participants of this fact; and
 - (b) in real time, all participants who have joined a Conference Event using a Conference Instance are shown the total number of active voice only calls for that Conference Event;
- (vi) supports Conference Events that integrate with external devices, including desktops, laptops, DVD players and whiteboards, to enable collaboration between End Users located in all Conference Subscriber Domains; and
- (vii) supports Unclassified conferencing from the bridging capability at OFFICIAL,

together, the “**Bridging Capability**”.

6.2.3 Conference Booking. The conference booking service shall allow End Users to make, amend and cancel conference bookings (each a “**Conference Booking**”), through at least two (2) different methods. If the Contractor chooses to provide a telephone solution for Conference Booking, such solution shall be provided via a toll-free number. The Contractor shall use all reasonable endeavours to book Conference Events requested on less than twenty-four (24) hours' prior notice.

6.2.4 Conference Management. In respect of each Conference Event booked, the Contractor shall provide a conference management service consisting of a facility for management of all aspects of each Conference Event, including:

- (i) the setup and control of the Conference Event;
- (ii) the introduction of conference participants;
- (iii) the authentication of Conference Instances; and
- (iv) remote assistance with call set up and technical issues for the duration of the Conference Event.

6.2.5 On request by the Customer Authority from time to time, the Contractor shall provide from a location within the United Kingdom, and in order to support Conference Events for all End Users within any Conference Subscriber Domain, the following:

- (i) **Third Party Terminal Testing.** Third party terminal testing (such third party terminals being any terminal other than a terminal owned by the Customer Authority) consists of the testing by the Contractor of third party conference end-point equipment to test the technical compatibility of third party conference end-points for use with the Bridging Capability (each a “**Third Party Terminal Test**”). The Contractor shall carry out third party terminal testing at times reasonably requested by the Customer Authority. The Contractor shall give guidance to third party users on issues that are preventing the technical compatibility of third party conference end-point equipment (using reasonable endeavours to ensure that such guidance provides the third party user with information that enables the third party user to determine how to achieve such compatibility).

The services described in this Paragraph 6.2.5(i), when taken together, shall be known as the “**Third Party Terminal Testing**”.

- (ii) **Conference Training.** Conference training consists of the Contractor providing End User training (“**Conference Training**”). Such Conference Training shall be delivered in accordance with Good Industry Practice and shall include an explanation that would enable a novice to understand how to operate and configure Conference Instances. This Conference Training shall also be distinct and different from any other training or familiarisation activity referred to in this Paragraph 6.

The Services described in this Paragraph 6.2, when taken together, shall be known as the “**Core Conferencing Service**”.

6.3 Conference Instance Services

6.3.1 From the relevant Operational Service Commencement Date, the Contractor shall provide End Users at specified Customer Authority Sites within all Conference Subscriber Domains with the ability to access the Core Conferencing Service in order to participate in a Conference Event using Conference Instances.

6.3.2 A “**Conference Instance**” generally consists of:

- (i) a Conference Terminal; and
- (ii) one or more Conference Screens,

that (as the context requires) have been, or are to be, installed and commissioned at a Customer Authority Site. However, Bespoke Conference Instances may also include additional equipment.

6.4 Conference Instance Types

6.4.1 **Existing Conference Instances.** The Contractor shall, in respect of any Conference Instances that are already installed at Customer Authority Sites as at the Operational Service Commencement Date for the Conferencing Service:

- (i) in respect of Conference Instances that are already installed at any UK and Overseas (Type A) Conference Subscriber Domain, perform the obligations set out in Paragraphs 6.4.6(i)(e) and 6.4.6(i)(f) of this Consolidated Schedule;

- (ii) in respect of Conference Instances that are already installed at any Overseas (Type B) and Overseas (Type C) Conference Subscriber Domain, perform the obligations set out in Paragraphs 6.4.6(ii)(g) and 6.4.6(ii)(h) of this Consolidated Schedule;
- (iii) in respect of Conference Instances that are already installed at any Mobile Conference Subscriber Domain, perform the obligations set out in Paragraphs 6.4.6(iii)(f) and 6.4.6(iii)(g) of this Consolidated Schedule; and
- (iv) in respect of Conference Instances that are already installed at any Maritime Platform Conference Subscriber Domain, perform the obligations set out in Paragraphs 6.4.6(iv)(e) and 6.4.6(iv)(f) of this Consolidated Schedule.

Where the Contractor is unable to repair faulty equipment within the relevant Conference Instance, the Contractor shall replace such Conference Instance equipment on a like-for-like basis where the existing equipment is equipment for which a Service Element code exists in the Contractor's Call-Off Service Catalogue. In all other cases, the Contractor shall replace such existing equipment with the most similar item of equipment for which a Service Element code exists in the Contractor's Call-Off Service Catalogue in accordance with the provisioning obligations set out in Paragraph 6.4.6 of this Consolidated Schedule.

6.4.2 New Conference Terminals. On request by the Customer Authority from time to time, the Contractor shall provide Conference Terminals to locations where a Conference Instance does not already exist. A “**Conference Terminal**” is equipment capable of capturing and processing real-time audio and video communications (including a single H.264/mpeg4 compatible CODEC as set out in the Standards, microphone, camera, all data cables, all interconnecting cables and any wall brackets or stands required to ensure that the Conference Terminal is physically stable) and which is configured for IP or ISDN connections. The Contractor shall enable the Customer Authority to request at least the following types of Conference Terminals:

- (i) **Conference Terminal (excluding screen).** A “**Conference Terminal (excluding screen)**” consists of a Conference Terminal (but no screen) suitable for deployment in office environments within all Conference Subscriber Domains;
- (ii) **Deployed Conference Terminal (including screen).** A “**Deployed Conference Terminal (including screen)**” consists of a Conference Terminal and a screen (such screen to measure at least nineteen (19) inches, but not more than twenty-six (26) inches, diagonally from corner to corner), both of which have been packaged in a container that will protect the terminal and screen during a flight (for example, a foam-packaged flight box). The Deployed Conference Terminal (including screen) shall only be available to End Users in the Mobile Conference Subscriber Domain and shall be capable of being operated within such container or when removed from such container; and
- (iii) **Tactical Conference Terminal (including screen).** A “**Tactical Conference Terminal (including screen)**” consists of a Conference Terminal and a screen, both of which have been packaged for long-haul

transport in a ruggedised container and are designed for use in military operational environments (for example, the CISCO Telepresence VX Tactical, Tandberg Tactical MXP or similar). The Tactical Conference Terminal (including screen) shall only be available to End Users in the Mobile Conference Subscriber Domain and shall be capable of being operated within such container.

6.4.3 As requested by the Customer Authority from time to time, the Contractor shall provide equipment (the “**Secure Conferencing Equipment**”) to suitably protect any of the Conference Terminals set out at Paragraph 6.4.2(i) to (iii) above so as to enable the Conferencing Service to be provided at the required Security Classification. The Contractor shall ensure that any Secure Conferencing Equipment:

- (i) is interoperable with the encrypted services provided by the Connectivity Tower Contractor;
- (ii) does not adversely impact on the availability or quality of any of the other services being provided to the Customer Authority; and
- (iii) is acquired from the relevant Customer Authority catalogue, with the Contractor confirming the same to the Customer Authority through an annual statement of compliance.

The Contractor shall ensure that each Conference Terminal has the ability to integrate with external devices, including desktops, laptops, DVD players and whiteboards, in order to enable collaboration between End Users located in all Conference Subscriber Domains.

6.4.4 New Conference Screens. On request by the Customer Authority from time to time, the Contractor shall provide new conference screens. The Contractor shall offer a range of conference screens capable of displaying video communications and producing audio communications and which are capable of being fully integrated with all Conference Terminals except for the Tactical Conference Terminals (including screen) (each a “**Conference Screen**”). The Contractor shall enable the Customer Authority to request at least the following types of Conference Screens for the relevant Conference Subscriber Domains set out below:

Conference Screen Size	Single or Dual Screen	Conference Screen Size Description	Conference Subscriber Domain
Small	Single screen	Measures less than twenty-six (26) inches diagonally from corner to corner	UK, Overseas (Type A), Overseas (Type B), Overseas (Type C), Mobile and Maritime Platforms
Medium	Single screen or Dual screen	Measures at least twenty-six (26) inches, but not more than forty-two (42) inches,	<i>Single screen:</i> All Conference Subscriber Domains

		diagonally from corner to corner	<i>Dual screen:</i> UK, Overseas (Type A), Overseas (Type B), Overseas (Type C), and Maritime Platforms
Large	Single screen or Dual screen	Measures forty-two (42) inches or more diagonally from corner to corner	<i>Single screen:</i> UK, Overseas (Type A), Overseas (Type B), Overseas (Type C), and Maritime Platforms <i>Dual screen:</i> UK, Overseas (Type A), Overseas (Type B), Overseas (Type C), and Maritime Platforms

Table 4 – Conferencing Service – Conference Screen options

6.4.5 Bespoke Conference Instance. From time to time, the Customer Authority may have requirements for Conference Screens and Conference Terminals which are not already described in this Paragraph 6.4. In such circumstances, the Contractor shall work with the relevant End Users to determine what the End Users' requirements are. As part of a Bespoke Conference Instance, the Contractor shall provide enhancements such as additional cameras, enhanced audio input and output equipment, additional audio visual equipment and room furniture. Bespoke Conference Instances shall only be available to End Users within the UK and Overseas (Type A) Conference Subscriber Domains. The provision of Bespoke Conference Instances shall be agreed by the Parties in accordance with the Contract Change Procedure.

6.4.6 Provisioning. Where a new Conference Instance has been requested pursuant to Paragraph 6.4.2 of this Consolidated Schedule by the Customer Authority, the Contractor shall provision new Conference Instances as follows:

- (i) For **UK** and **Overseas (Type A)** Conference Instances, the Contractor shall:
 - (a) undertake surveys of the Customer Authority Site in order to complete the design documentation required for Approval of the Conference Instance delivery;
 - (b) deliver, install and commission the Conference Instance at the required Customer Authority Site;

- (c) provide on-site operational familiarisation training to Customer Authority nominee(s) which gives an overview of how the equipment delivered should be used and operated immediately following installation;
 - (d) provide handbooks and fault handling instructions to the Customer Authority's nominee;
 - (e) on request by the Customer Authority's nominee, provide a member of the Contractor Personnel to guide the End User through the fault diagnostic procedure remotely and in real time; and
 - (f) attend the Customer Authority Site to repair or replace faulty equipment within the relevant Conference Instance, at a time and date reasonably specified by the Customer Authority.
- (ii) For **Overseas (Type B)** and **Overseas (Type C)** Conference Instances, the Contractor shall:
- (a) deliver the Conference Instance equipment to a nominated UK Customer Authority Site for onward transportation by the Customer Authority;
 - (b) if required by the Customer Authority, provide on-site installation familiarisation training to a Customer Authority nominee, at the UK Customer Authority Site nominated for delivery under Paragraph 6.4.6(ii)(a) above, which gives an overview of how such Conference Instance should be installed, commissioned, inter-connected and replaced;
 - (c) provide written installation instructions for the Conference Instance which has been delivered;
 - (d) provide operational familiarisation training to a Customer Authority nominee(s), at the UK Customer Authority Site nominated for delivery under Paragraph 6.4.6(ii)(a) above, which gives an overview of how the equipment delivered should be used and operated;
 - (e) through the Service Centre, provide a member of the Contractor Personnel to guide a Customer Authority nominee through the installation and commissioning of each Conference Instance remotely until the Customer Authority has been able to achieve a successful Conference Event using that Conference Instance;
 - (f) provide handbooks and fault handling instructions to the Customer Authority's nominee;
 - (g) on request by the Customer Authority's nominee, provide a member of the Contractor Personnel to guide the End User through the fault diagnostic procedure remotely and in real time; and
 - (h) collect faulty Conference Instance equipment from a nominated UK Customer Authority Site at a time and date reasonably specified by the Customer Authority (and at the same time as collecting the faulty

equipment, deliver appropriate replacement Conference Instance equipment);

(iii) For **Mobile** Conference Instances, the Contractor shall:

- (a) if required by the Customer Authority, deliver the Conference Instance equipment to a nominated UK Customer Authority Site, after which the Customer Authority will contact the Service Centre to commission the Conference Instance and provide on-site installation familiarisation training to a Customer Authority nominee, at the same UK Customer Authority Site, which gives an overview of how such Conference Instance should be installed, commissioned, inter-connected and replaced;
- (b) provide written installation instructions for the Conference Instance which has been delivered;
- (c) provide on-site operational familiarisation training to a Customer Authority nominee(s), at the UK Customer Authority Site nominated for delivery under Paragraph 6.4.6(iii)(a) above, which gives an overview of how the equipment delivered should be used and operated;
- (d) through the Service Centre, provide a member of the Contractor Personnel to guide a Customer Authority nominee through the installation and commissioning of each Conference Instance remotely until the Customer Authority has been able to achieve a successful Conference Event using that Conference Instance;
- (e) provide handbooks and fault handling instructions to the Customer Authority's nominee;
- (f) on request by the Customer Authority's nominee, provide a member of the Contractor Personnel to guide the End User through the fault diagnostic procedure remotely and in real time; and
- (g) collect faulty Conference Instance equipment from a nominated UK Customer Authority Site at a time and date reasonably specified by the Customer Authority (and at the same time as collecting the fault equipment, deliver appropriate replacement Conference Instance equipment);

(iv) For **Maritime Platform** Conference Instances, the Contractor shall:

- (a) deliver the on-board Conference Instance to a nominated UK Customer Authority Site and, except as otherwise directed by the Customer Authority, install and commission that Conference Instance at the same UK Customer Authority Site;
- (b) provide written installation instructions and installation familiarisation training for the Conference Instance which has been delivered;
- (c) provide on-board operational familiarisation training immediately following installation to a Customer Authority nominee(s) at the UK Customer Authority Site nominated for delivery under Paragraph

6.4.6(iv)(a) above which gives an overview of how the equipment delivered should be used and operated;

- (d) provide handbooks and fault handling instructions to the Customer Authority's nominee;
- (e) on request by the Customer Authority's nominee, provide a member of the Contractor Personnel to guide the End User through the fault diagnostic procedure remotely and in real time; and
- (f) collect faulty Conference Instance equipment from a nominated UK Customer Authority Site at a time and date reasonably specified by the Customer Authority (and at the same time as collecting the faulty equipment, deliver appropriate replacement Conference Instance equipment).

6.5 Closed User Groups

6.5.1 The Contractor shall, upon request by the Customer Authority, create Closed User Groups which enable End Users within the Closed User Groups to use the Conferencing Services to meet particular security or operational requirements.

6.5.2 From the relevant Operational Service Commencement Date, the Contractor shall maintain any existing Closed User Groups in place for conferencing services immediately prior to the relevant Operational Service Commencement Date, unless otherwise requested by the Customer Authority, including:

- (i) **SECRET UK FRANCE EYES ONLY:** a Closed User Group which enables End Users at specified Customer Authority Sites to access and participate in point-to-point and multi-point Conference Events at SECRET UK FRANCE EYES ONLY Security Classification. The Contractor shall also provide the interconnecting cable within a specified UK Customer Authority Site to enable connection with the Conferencing Service in France; and
- (ii) **TOP SECRET STRAP 2:** a Closed User Group which enables End Users at specified Customer Authority Sites to access and participate in point-to-point and multi-point Conference Events at TOP SECRET STRAP 2 Security Classification.

6.6 MACs

6.6.1 On request by the Customer Authority from time to time, the Contractor shall carry out the types of MACs shown in the table below (each a "**Conferencing Service MAC**").

6.6.2 The activities to be carried out by the Contractor within each Conferencing Service MAC shall include any Site attendance, removal, de-installation, de-commissioning, configuration and administrative work required as a result of such Conferencing Service MAC, including equipment removal, CODEC configuration and amendments to the Conference Directory and the information available through the Management Information Exchange.

MAC	Non-exhaustive list of activities included within the MAC
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Remote/soft move/amendment	<ul style="list-style-type: none"> • All preparatory work, including design activities in validating a remote change or amendment requested by the Customer Authority (i.e. a change or amendment that is possible within the capability of the existing equipment and can be completed remotely without a change or amendment in hardware); • remote work to complete the change or amendment requested by the Customer Authority; and • any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Move or amendment - engineer visit required	<ul style="list-style-type: none"> • All preparatory work, including a Site survey (if required) and design activities; • carry out any MAC Approval Activities; • once any MAC Approvals have been obtained, undertake activities required to fulfil the Customer Authority MAC request; and • any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Complex move or amendment	<ul style="list-style-type: none"> • All preparatory work, including a Site survey (if required) to scope the proposed move and design activities, and production of a costed proposal for the work involved; • carry out any MAC Approval Activities; • once any MAC Approvals have been obtained, undertake activities required in order to fulfil the Customer Authority MAC request; and • any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Remote/soft cease	<ul style="list-style-type: none"> • All preparatory work, including design activities in validating a remote cease requested by the Customer Authority (i.e. a cease that is possible within the capability of the existing equipment and can be completed remotely without a change or amendment in hardware); • carry out all remote work to complete the cease requested by the Customer Authority and remove the appropriate service in accordance with Paragraph 3 of this Consolidated Schedule, while ensuring that any remaining Services are maintained; and • any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Cease – engineer	<ul style="list-style-type: none"> • All preparatory work, including a Site survey (if required)

visit required	<ul style="list-style-type: none"> and design activities; carry out any MAC Approval Activities; once any MAC Approvals have been obtained, all work necessary to de-commission, de-install and remove the appropriate service and all associated hardware in accordance with Paragraph 3 of this Consolidated Schedule, while ensuring that any remaining Services are maintained; and any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Complex cease	<ul style="list-style-type: none"> All preparatory work, including a Site survey (if required) to scope the proposed cease and production of a costed proposal for the work involved; carry out any MAC Approval Activities; once any MAC Approvals have been obtained, all work necessary to cease the relevant service; and any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.

Table 5 – Conferencing Service MACs

7 OPERATOR ASSISTANCE SERVICE

7.1 Operator Assistance Service Overview

- 7.1.1** The Contractor shall provide the Operator Assistance Service as more particularly described in the remainder of this Paragraph 7.
- 7.1.2** The Contractor shall ensure that the Operator Assistance Service (unless expressly stated to the contrary in respect of a particular aspect of such Service in this Paragraph 7) is accessible to all End Users at OFFICIAL and SECRET and to other callers at OFFICIAL.
- 7.1.3** The Contractor shall provide the Operator Assistance Service from Whitehall and at least one (1) other location within the United Kingdom (the “**OAS Locations**”), in order to provide a service to all End Users and other callers.
- 7.1.4** From the relevant Operational Service Commencement Date, the Contractor shall provide the Operator Assistance Service twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty five (365) days a year.

7.2 Operator Assistance Service

- 7.2.1** The “**Operator Assistance Service**” means the Operator Assistance Capability and the Emergency Call Handling Capability taken together.
- 7.2.2** **Operator Assistance Capability.** The Operator Assistance Capability shall comprise the Call Reception Service, the Directory Enquiry Service, the Call Recording Service and the Secure Manual Voice Gateway Service (together, the “**Operator Assistance Capability**”). The Contractor shall ensure that the Operator

Assistance Capability is contactable by all End Users and other callers from the public switched telephone network (or the in-country equivalent for overseas locations) via DDI numbers configured to route to specified OAS, and the Closed Network via a telephone number. The Contractor shall provide the Operator Assistance Capability in English and, for as long as the Customer Authority requires, in German.

(i) **Call Reception Service.** The Contractor shall provide a facility at the OAS Locations in which call reception agents receive incoming calls from callers and subsequently connect such calls to the relevant End User as requested by the caller (each a “**Call Reception Call**”). Such Call Reception Calls shall be connected from and to networks operated at different Security Classifications, as follows:

- (a) Unclassified (public switched telephone network (or the in-country equivalent for overseas locations)) to OFFICIAL (Fixed Voice Service);
- (b) OFFICIAL (Fixed Voice Service) to Unclassified (public switched telephone network (or the in-country equivalent for overseas locations)) and OFFICIAL (Fixed Voice Service); and
- (c) SECRET (Fixed Voice Service) to Unclassified (public switched telephone network (or the in-country equivalent for overseas locations)), to OFFICIAL (Fixed Voice Service) and SECRET (Fixed Voice Service).

The services described in this Paragraph 7.2.2(i), when taken together, shall be known as the “**Call Reception Service**”;

(ii) **Directory Enquiry Service.** The Contractor shall provide for:

- (a) a directory enquiry database, to be updated on an on-going basis, containing details of all Customer Authority and nominated third party contact information provided by the Customer Authority from time to time in a format to be proposed by the Contractor and Approved by the Customer Authority (the “**Directory Enquiry Database**”); and
- (b) the receipt of calls from End Users and other callers to directory enquiry agents at the OAS Locations and, subject to any restrictions set out in the remainder of this Paragraph 7.2.2(ii)(b), the provision by the relevant directory enquiry agent of such information as requested by the End User or other caller from the Directory Enquiry Database (each a “**Directory Enquiry Call**”). The Contractor shall ensure that the directory enquiry agent shall not provide any End User or other caller with information that the Customer Authority has directed the Contractor not to disclose, either at all or in relation to particular End Users or other callers,

together, the “**Directory Enquiry Service**”.

The Contractor shall ensure that any updating of the Directory Enquiry Database carried out by the Contractor in accordance with Paragraph

7.2.2(ii)(a) above does not impact upon the Availability of the Directory Enquiry Service;

(iii) **Call Recording Service.** The Contractor shall record the part of all calls involving operators in the OAS Locations, and shall:

- (a) retain and make readily accessible to the Customer Authority each such recording for at least three (3) months from the date of such recording; and
- (b) thereafter retain such recording in storage for a period of twelve (12) months (together, the “**Call Recording Service**”); and

(iv) **Secure Manual Voice Gateway Service.** The Contractor shall:

- (a) connect Private Audio Calls manually through the secure manual voice gateway referred to in Paragraph 8.2.4 of this Consolidated Schedule at SECRET only, where such calls cannot be connected through a secure automated gateway; and
- (b) connect and host Audio Conference Calls through the secure manual voice gateway referred to in Paragraph 8.2.4 of this Consolidated Schedule 3 at SECRET only, where such calls cannot be connected through a secure automated gateway,

(the “**Secure Manual Voice Gateway Service**”).

7.2.3 Emergency Call Handling Capability. The Contractor shall provide the following capability, which consists of:

- (i) answering Emergency Calls from End Users;
- (ii) complying with each Customer Authority Site’s Emergency Plan;
- (iii) informing all necessary third parties; and
- (iv) real-time supervision of each Emergency Call by the duty supervisor and another operator where appropriate,

together, the “**Emergency Call Handling Capability**”.

7.3 MACs

There are no MACs associated with the Operator Assistance Service.

8 BOUNDARY PROTECTION SERVICE

8.1 Boundary Protection Service Overview

8.1.1 The Contractor shall provide the Boundary Protection Service as more particularly described in the remainder of this Paragraph 8.

8.1.2 The Contractor shall ensure that the Boundary Protection Service (unless expressly stated to the contrary in respect of a particular aspect of such Service in this Paragraph 8) is accessible to End Users at OFFICIAL, SECRET and TOP SECRET, as more particularly described in the remainder of this Paragraph 8.

8.1.3 The Contractor shall deliver the Boundary Protection Service from gateways located only within the UK.

8.1.4 From the relevant Operational Service Commencement Date, the Contractor shall provide the Boundary Protection Service to all End Users and other callers, twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty five (365) days a year.

8.2 Boundary Protection Service

8.2.1 The Contractor shall provide a gateway or number of gateways (including those gateways in place as at the relevant Operational Service Commencement Date) that enable voice or video communications (or both) at various Security Classifications to be made between End Users on the Closed Network and callers on External Networks (including the public switched telephone network (or the in-country equivalent for overseas locations)) (each a “**Gateway**”).

8.2.2 Each such Gateway shall, as requested by the Customer Authority, be either:

- (i) **Non-resilient** – a single gateway that offers no resilience; or
- (ii) **Resilient Diverse** – a gateway that is fully resilient and is located separately in two (2) geographically diverse locations.

8.2.3 The Contractor shall:

- (i) undertake surveys at any relevant location and complete the design documentation (including draft solution design and proposed timeframe for delivery) in relation to any new Gateways required by the Customer Authority from time to time;
- (ii) implement such new Gateways referred to in Paragraph 8.2.3(i) above; and
- (iii) monitor, support, maintain and repair all Gateways.

8.2.4 The Contractor shall provide a secure manual voice gateway at SECRET only for use in relation to the Secure Manual Voice Gateway Service.

8.2.5 The Contractor shall ensure that the Boundary Protection Service does not adversely impact on the availability or quality of any of the services to which it relates.

The services described in this Paragraph 8.2, when taken together, shall be known as the “**Boundary Protection Service**”.

8.3 MACs

8.3.1 On request by the Customer Authority from time to time, the Contractor shall carry out the types of MACs shown in the table below (each a “**Boundary Protection Service MAC**”).

8.3.2 For Boundary Protection Service MACs involving engineer visits, the relevant Boundary Protection Service MAC will also include any configuration and administrative work required as a result of such Boundary Protection Service MAC.

MAC	Non-exhaustive list of activities included within the MAC
Remote/soft amendment	<ul style="list-style-type: none">• All preparatory work, including design activities in validating a remote amendment requested by the

	<p>Customer Authority (i.e. an amendment that is possible within the capability of the existing equipment and can be completed remotely without a change in hardware);</p> <ul style="list-style-type: none"> • remote work to complete the amendment requested by the Customer Authority; and • any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Move or amendment – engineer visit required	<ul style="list-style-type: none"> • All preparatory work, including a Site survey (if required) and design activities; • carry out any MAC Approval Activities; • once any MAC Approvals have been obtained, all work necessary to complete the change or amendment requested by the Customer Authority; and • any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Complex Move or amendment	<ul style="list-style-type: none"> • All preparatory work, including a Site survey (if required) and design activities, and production of a costed proposal for the work involved; • carry out any MAC Approval Activities; • once any MAC Approvals have been obtained, undertake activities required in order to fulfil the Customer Authority MAC request; and • any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Remote/soft cease	<ul style="list-style-type: none"> • All preparatory work, including design activities in validating a remote cease requested by the Customer Authority (i.e. a cease that is possible within the capability of the existing equipment and can be completed remotely without a change or amendment in hardware); • remote work to complete the cease requested by the Customer Authority; and • any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.
Cease – engineer visit required	<ul style="list-style-type: none"> • All preparatory work, including a Site survey (if required) and design activities; • carry out any MAC Approval Activities; and • once any MAC Approvals have been obtained, all work necessary to de-commission, de-install and remove the Gateway and all associated hardware in accordance with Paragraph 3 of this Consolidated Schedule, while

	ensuring that any remaining Services are maintained.
Complex cease	<ul style="list-style-type: none"> • All preparatory work, including a Site survey (if required) to scope the proposed cease and production of a costed proposal for the work involved; • carry out any MAC Approval Activities; • once any MAC Approvals have been obtained, all work necessary to de-commission, de-install and remove the Gateway and all associated hardware in accordance with Paragraph 3 of this Consolidated Schedule, while ensuring that any remaining Services are maintained; and • any other activity required to signal completion of, and to document and test, the MAC in accordance with the Standards.

Table 6 – Boundary Protection Service MACs

9 MOBILE VOICE AND DATA SERVICE

9.1 Mobile Voice and Data Service Overview

9.1.1 In providing the Mobile Voice and Data Service, the Contractor shall:

- (i) provide the Core Mobile Service;
- (ii) provide the Mobile Device Service and the additional obligations set out in Paragraph 9.3 of this Consolidated Schedule in relation to each Mobile Device;
- (iii) provide the Mobile Device Accessory Service and the additional obligations set out in Paragraph 9.4 of this Consolidated Schedule in relation to each Mobile Device Accessory;
- (iv) provide the Mobile Tariff Service;
- (v) provide the Short-Term Hire Service; and
- (vi) carry out certain MACs,

each as more particularly described in the remainder of this Paragraph 9.

9.1.2 The Contractor shall ensure that the Mobile Voice and Data Service (unless expressly stated to the contrary in respect of a particular aspect of such Service in this Paragraph 9) is provided at Unclassified and OFFICIAL.

9.1.3 The Contractor shall provide the Mobile Voice and Data Service to all End Users (regardless of their location).

9.1.4 From the relevant Operational Service Commencement Date, the Contractor shall provide the Mobile Voice and Data Service twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty five (365) days a year.

9.2 Core Mobile Service

9.2.1 Core Mobile Capability

The Contractor shall:

- (i) **Mobile Functions:** provide the capability to enable End Users, through a combination of Mobile Devices, SIM cards and the Mobile Tariff Service, to do one, some or all of the following (as required by the Customer Authority from time to time):
 - (a) make and receive Private Audio Calls;
 - (b) send and receive SMS and MMS messages;
 - (c) for Mobile Devices integrated with the OFFICIAL Mobile Data Interface Capability, send and receive emails, including attachments;
 - (d) access the Internet;
 - (e) enable callers to leave Voicemail and End Users to access such Voicemail;
 - (f) for Mobile Devices integrated with the OFFICIAL Mobile Data Interface Capability, access the authenticated and non-authenticated Customer Authority intranet; and
 - (g) receive Approved mobile applications, including those that enable the End User to view, edit and generate Microsoft Office documents, and read PDF documents,

together, the “**Mobile Functions**”. The Contractor shall provide the Mobile Functions on all appropriate current mobile transmission technologies, including GSM, GPRS, UMTS, HSCSD, 2.5G, 3G, 4G and HSDPA, as well as emerging mobile transmission technologies from time to time;

- (ii) **Integration:** integrate any Contractor Software required to manage the Mobile Voice and Data Service with relevant Customer Authority Equipment or infrastructure;
- (iii) **Mobile Data Service Connection (to be provided at OFFICIAL only):** provide a secure and dedicated connection to specified points of presence nominated by the Customer Authority through which all data sent and received by nominated End Users from Mobile Devices integrated with the OFFICIAL Mobile Data Interface Capability shall be routed at OFFICIAL;
- (iv) **Lost or Stolen Mobile Devices:** enable the reporting of lost or stolen Mobile Devices, the remote disablement of such Mobile Devices (including the SIM card) and, prior to such disablement, the secure deletion of all data on OFFICIAL Mobile Devices, and (where this is possible) other Mobile Devices and any installed expansion cards;
- (v) **Mobile Telecommunication Privileged Access Scheme (“MTPAS”):** in accordance with Consolidated Schedule 6 (*Standards*), enable the Customer Authority to provide priority network access to all MTPAS subscribers during periods of crisis;
- (vi) **Mobile Call Barring:** block some or all incoming or outgoing mobile voice or data traffic by specified End Users, as required by the Customer Authority from time to time;

- (vii) **Premium-rate Traffic:** block all premium-rate traffic to and from all End Users, to the fullest extent permitted by the relevant Regulatory Body;
- (viii) **Network Coverage:** ensure the Mobile Functions are available to End Users so as to enable End Users to send and receive mobile traffic from all UK geographic locations to the fullest extent of the Contractor's network capability from time to time and, where the Contractor's network capability is insufficient to enable End Users to send and receive mobile traffic, propose a range of options to enable such transmission, including:
 - (a) the deployment of signal or coverage enhancement equipment (or both); and
 - (b) the provision of SIM cards from alternative providers at no additional cost to the Customer Authority,
 and implement any of the Contractor's proposed options which the Customer Authority requires;
- (ix) **International Roaming:** ensure the Mobile Functions are available to End Users so as to enable all End Users to send and receive mobile traffic from non-UK geographic locations;
- (x) **Telephone Preference Service:** register all telephone numbers assigned to, and used by, End Users with the Telephone Preference Service and other similar central opt-out registers through which individuals or organisations can register their wish not to receive unsolicited sales and marketing calls; and
- (xi) **Call Logging:** track call logging data and provide the information set out in Consolidated Schedule 14 (*Performance Monitoring and Reporting*).

The services described in this Paragraph 9.2.1, when taken together, shall be known as the "**Core Mobile Capability**".

9.2.2 **OFFICIAL Mobile Data Interface Capability**

The Contractor shall provide End Users with the ability at OFFICIAL to access and synchronise with the Microsoft Outlook suite of services and the authenticated and non-authenticated intranet, each as provided to the Customer Authority by third parties through gateways provided by the Connectivity Tower Contractor (the "**OFFICIAL Mobile Data Interface Capability**").

9.2.3 **OFFICIAL Mobile Voice Capability**

On request by the Customer Authority, the Contractor shall provide End Users with the ability to make and receive Private Audio Calls at OFFICIAL using an appropriate Mobile Device made available pursuant to Paragraph 9.3.1 below (the "**OFFICIAL Mobile Voice Capability**").

9.2.4 **Mobile Tariff Monitoring Capability**

The Contractor shall pro-actively monitor the usage of each End User over a rolling three-month period and transfer such End User to the lowest cost tariff within the range made available by the Contractor as part of the Mobile Tariff Service based

on their usage, to provide the Customer Authority with the best value for money (the “**Mobile Tariff Monitoring Capability**”).

9.2.5 Temporary Enhancement Service

As requested by the Customer Authority from time to time, the Contractor shall deploy signal or coverage enhancement equipment (or both) in order to provide temporary additional network capability for the duration of a special event (each a “**Temporary Enhancement**”).

The services described in this Paragraph 9.2.5, when taken together, shall be known as the “**Temporary Enhancement Service**”.

9.2.6 Mobile Number Portability

As requested by the Customer Authority from time to time, the Contractor shall port End User mobile numbers free of charge to its network and apply the relevant tariff provided pursuant the Mobile Tariff Service.

The services described in this Paragraph 9.2, when taken together, shall be known as the “**Core Mobile Service**”.

9.3 Mobile Devices

9.3.1 Mobile Device Service. The Contractor shall make available a range of unlocked Mobile Devices which the Customer Authority may request and which offers:

- (i) the full range of technologies available in the market from time to time, including GSM, dual-band, tri-band, quad-band (and any replacement technologies);
- (ii) the full range of capabilities and features that are available in the market from time to time (from basic Mobile Devices to feature-rich Mobile Devices, including smartphones), including:
 - (a) Mobile Devices with and without camera and video functions; and
 - (b) Mobile Devices that are suitable to meet specific requirements of Customer Authority personnel, including Customer Authority personnel with disabilities or specialist duties (including those requiring lone worker protection); and
- (iii) Mobile Devices with the ability to access the Mobile Functions either at Unclassified only or at both Unclassified and OFFICIAL.

9.3.2 The range of Mobile Devices described in Paragraph 9.3.3 below shall include:

- (i) basic – for use at Unclassified to provide an End User with the ability to access a limited set of the Mobile Functions;
- (ii) smart phone – for use at Unclassified to provide an End User with the ability to access the full set of the Mobile Functions;
- (iii) data only – for use at Unclassified or OFFICIAL to provide an End User with the ability to transmit and receive mobile data traffic only and to integrate with the OFFICIAL Mobile Data Interface Capability; and

- (iv) OFFICIAL Voice and Data compatible – for use at OFFICIAL to provide an End User with the ability to access the full set of the Mobile Functions and to integrate with the OFFICIAL Mobile Data Interface Capability and OFFICIAL Mobile Voice Capability.

9.3.3 Without prejudice to the above, the Contractor shall ensure that the range of unlocked Mobile Devices offered by it are representative of up-to-date technologies generally offered by mobile operators in the market from time to time. The Contractor shall also include and offer any additional makes and models of unlocked Mobile Devices reasonably required by the Customer Authority from time to time.

The services described in Paragraphs 9.3.1 to this 9.3.3, when taken together, shall be known as the “**Mobile Device Service**”.

9.3.4 **Manufacturer’s Warranty.** The Contractor shall provide the standard manufacturer’s warranty in relation to each Mobile Device it supplies, subject to a minimum warranty period of twelve (12) months, pursuant to which faulty Mobile Devices are replaced free of charge.

9.4 Mobile Device Accessories

9.4.1 **Mobile Device Accessory Service.** The Contractor shall make available a full range of accessories available in the market from time to time which the Customer Authority may request, such accessories to be:

- (i) compatible with the range of Mobile Devices made available pursuant to Paragraph 9.3.1 above; and
- (ii) available for a period of at least twelve (12) months following the discontinuation of any Mobile Device,

each a (“**Mobile Device Accessory**”).

9.4.2 The range of Mobile Device Accessories made available by the Contractor shall include:

- (i) hands free kits – including Bluetooth headsets, hands free kits and car kits;
- (ii) replacement batteries; and
- (iii) chargers – in car/travel and home,

the services described in Paragraph 9.4.1 and 9.4.2 above, when taken together, shall be known as the “**Mobile Device Accessory Service**”.

9.4.3 **SIM Cards.** The Contractor shall provide SIM cards that are compatible for use by the Customer Authority and that are activated and ready for use on the Mobile Tariff Service requested by the Customer Authority and that enable End Users to access the Core Mobile Service.

9.5 Mobile Tariff Service

9.5.1 **Mobile Voice Tariffs.** The Contractor shall:

- (i) provide a range of inclusive and “pay-per-use” mobile voice tariffs (that include both bundled and un-bundled international roaming) suitable for high and low usage, such tariffs to:

- (a) make no distinction between a SIM card-only solution and a SIM card provided with a Mobile Device; and
 - (b) include no cancellation charge or minimum duration;
- (ii) review its tariffs annually against the usage profile of all End Users and:
 - (a) promptly provide the Customer Authority with the results of such review; and
 - (b) advise the Customer Authority if there are more favourable tariffs based on such usage profile (and provide all relevant supporting data) and introduce such tariffs as the Customer Authority selects (either to replace or complement the existing tariffs); and
- (iii) as required by the Customer Authority from time to time, move End Users between any tariffs made available pursuant to the Mobile Tariff Service at no cost,

together, the “**Mobile Voice Tariffs**”.

9.5.2 Mobile Data Tariffs. The Contractor shall:

- (i) provide a range of inclusive and ‘pay-per-use’ mobile data tariffs (that include both bundled and un-bundled international roaming) suitable for high and low usage, such tariffs to:
 - (a) make no distinction between a SIM card-only solution and a SIM card provided with a Mobile Device; and
 - (b) include no cancellation charge or minimum duration;
- (ii) review its tariffs annually against the usage profile of all End Users and:
 - (a) promptly provide the Customer Authority with the results of such review; and
 - (b) advise the Customer Authority if there are more favourable tariffs based on such usage profile (and provide all relevant supporting data) and introduce such tariffs as the Customer Authority selects (either to replace or complement the existing tariffs); and
- (iii) as required by the Customer Authority from time to time, move End Users between any tariffs made available pursuant to the Mobile Tariff Service at no cost, as required by the Customer Authority,

together, the “**Mobile Data Tariffs**”.

9.5.3 Mobile Voice and Data Tariffs. The Contractor shall provide the Customer Authority with the ability to combine a Mobile Voice Tariff and a Mobile Data Tariff to support the provision of a combined mobile voice and data service to End Users.

9.5.4 The services described in this Paragraph 9.5, when taken together, shall be known as the “**Mobile Tariff Service**”.

9.6 Short Term Hire Service (to be provided at Unclassified only)

9.6.1 On request by the Customer Authority, the Contractor shall:

- (i) provide a range of Mobile Devices for short term hire for use at Unclassified in any location in the world, together with a related SIM card and tariff;
- (ii) deliver such Mobile Devices to a location and at a time and date specified by the Customer Authority; and
- (iii) enable such Mobile Devices to be used (with the related SIM card and tariff) for the period of time notified by the Customer Authority.

together, a “**Short-Term Hire**”.

9.6.2 The services described in this Paragraph 9.6, when taken together, shall be known as the “**Short-Term Hire Service**”.

9.7 Provisioning

9.7.1 Where a new SIM card or Mobile Device has been requested pursuant to Paragraph 9.3.1 or 9.4.1 above by the Customer Authority, the Contractor shall:

- (i) deliver the SIM card or Mobile Device at a UK location specified by the Customer Authority;
- (ii) deliver activation instructions for Mobile Devices to be used at OFFICIAL;
- (iii) on request by the Customer Authority’s nominee, provide a member of the Contractor Personnel to guide the End User through the fault diagnostic procedure remotely and in real time;
- (iv) simultaneously collect faulty, and deliver replacement parts for, Mobile Devices or SIM cards, where such Mobile Device or SIM card is used at Unclassified only, at a location reasonably specified by the Customer Authority, and confirm the date and delivery window to the Customer Authority; and
- (v) deliver replacement parts of Mobile Devices or SIM cards (where such parts are faulty), where such Mobile Device or SIM card is used at OFFICIAL, at a location reasonably specified by the Customer Authority, and confirm the date and delivery window to the Customer Authority.

9.7.2 Where a new Mobile Device Accessory has been requested pursuant to Paragraph 9.4.1 above by the Customer Authority, the Contractor shall deliver the Mobile Device Accessory at a UK location specified by the Customer Authority.

9.8 MACs

9.8.1 On request by the Customer Authority from time to time, the Contractor shall carry out the types of MACs for the Mobile Voice and Data Service as shown in the table below (each a “**Mobile Voice and Data Service MAC**”).

MAC	Non-exhaustive list of activities included within the MAC
Remote/soft amendment	<ul style="list-style-type: none"> • All preparatory work, including any design activities required for a remote change requested by the Customer Authority (i.e. a change that is possible within the capability of the existing equipment and can be completed remotely)

	<ul style="list-style-type: none"> without a change in hardware); and remote work to complete the change requested by the Customer Authority.
Remote/soft cease	<ul style="list-style-type: none"> Remote work to deactivate a specified SIM card and cease the associated Mobile Voice Tariff and Mobile Data Tariff, where no removal of equipment is required.

Table 7 – Mobile Voice and Data Service MACs

10 ENCRYPTION SERVICE

10.1 Encryption Service Overview

10.1.1 The Contractor shall:

- (i) provide the Encryption Service; and
- (ii) carry out certain MACs,

each as more particularly described in the remainder of this Paragraph 10.

10.1.2 The Contractor shall provide the Encryption Service to support the delivery of each relevant Service, irrespective of End User location.

10.1.3 From the relevant Operational Service Commencement Date and for so long as the Customer Authority requires, the Contractor shall provide the Encryption Service twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty five (365) days a year.

10.2 Encryption Service

10.2.1 The “**Encryption Service**” means the Core Encryption Capability set out in the remainder of this Paragraph 10.

10.2.2 Core Encryption Capability

The Contractor shall ensure that:

- (i) it supplies, handles, installs, commissions, supports, maintains and manages all encryption (including cryptographic devices and encryption key materials (KEYMAT)) required for the delivery of the Services (including any Service Elements) from time to time in accordance with the Standards and the requirements of this Consolidated Contract, including obtaining all encryption key materials (KEYMAT) in accordance with the relevant Standards, and confirming the same to the Customer Authority through its annual statement of compliance;
- (ii) it uses authentication and revocation processes that are approved in advance by CESG;
- (iii) any cryptographic devices used in the delivery of the Services do not negatively impact the use of the Services or the performance of the Services in accordance with the Service Levels;
- (iv) it provides the Customer Authority with the ability to establish Communities of Interest and Closed User Groups; and

- (v) in respect of each:
 - (a) Protected End User Device; or
 - (b) Secure Conferencing Equipment associated with a Conference Terminal,provided pursuant to Paragraphs 5.3.4(iii) and 6.4.3 respectively of this Consolidated Schedule, it provides a handbook detailing guidance on the use of such cryptographic equipment,
- together, the “**Core Encryption Capability**”.

10.3 MACs

Whenever an Encryption Service supports a Service that is subject to a MAC, the Contractor shall actively monitor the impact of a cease on the Encryption Service and notify the Customer Authority within the timeframe for provisioning of the relevant cease of whether or not such impact will lead to any reduction to the Core Encryption Capability that is possible through rationalising the Encryption Service to deliver the most efficient and effective Encryption Service (each a “**Encryption Service MAC**”).

11 PROFESSIONAL SERVICES

11.1 Professional Services Overview

- 11.1.1 From time to time, the Contractor shall provide Contractor Personnel with appropriate experience and qualifications to carry out, and conclude successfully, the tasks described in the Rate Card. The Contractor’s provision of Contractor Personnel to carry out each of such tasks, together with the carrying out of that task, shall be known as a “**Professional Service**”.
- 11.1.2 Activities included as part of any other Service shall not be considered part of the Professional Services or charged for as a Professional Service. The Contractor shall not carry out and shall not be entitled to invoice for any Professional Service, unless that Professional Service has been specifically requested in advance by the Customer Authority and identified by the Customer Authority as being a Professional Service.
- 11.1.3 The Contractor shall, at the Customer Authority’s request from time to time, provide the Professional Services in the following Subscriber Domains:
 - (i) **UK**, where the Contractor Personnel carrying out the relevant Professional Service is (or are, as the case may be) to be located within the United Kingdom;
 - (ii) **Overseas (Rate Card Locations 1)**, where the Contractor Personnel carrying out the relevant Professional Service is (or are, as the case may be) to be located within Cyprus, Germany or North America; and
 - (iii) **Overseas (Rate Card Locations 2)**, where the Contractor Personnel carrying out the relevant Professional Service is (or are, as the case may be) to be located in any location that is not the UK or Overseas (Rate Card Locations 1).

(each a “**Rate Card Subscriber Domain**”).

PART B: CONTRACTOR SERVICE DESCRIPTIONS