

**SCHEDULE 12B**

**CO-LOCATION SUPPLEMENTARY COOLING SERVICE**

## SCHEDULE 12B

### CO-LOCATION SUPPLEMENTARY COOLING SERVICE

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## **SCHEDULE 12B**

### **CO-LOCATION SUPPLEMENTARY COOLING SERVICE**

#### **1. GENERAL**

1.1 This Schedule sets out the terms and conditions under which OpenNet will provide the Requesting Licensee with Co-Location Supplementary Cooling Service at the Central Offices.

1.2 Except as provided in this Schedule, the Requesting Licensee shall, at its own cost, provide all installation materials, tools, equipment and manpower needed for the adjustment and / or modification of their Co-Location Equipment (if required) to use the Supplementary Cooling Service. Where any work is to be carried out by OpenNet under this Schedule, and the Charge is not defined under Schedule 15 (Charges), the Requesting Licensee shall pay all costs incurred by OpenNet in provisioning Co-Location Supplementary Cooling Service, subject to the following conditions:

(a) before incurring such costs, OpenNet will provide Requesting Licensee with prior written notice that the Requesting Licensee's request requires OpenNet to undertake such work and such notice shall clearly and with sufficient detail set out the following:

(i) the costs which OpenNet seeks to recover from the Requesting Licensee (including a breakdown of the individual cost components and justification for incurring each cost component); and

(ii) based on the information set out in paragraph (i), a written quotation to the Requesting Licensee in respect of the work to be undertaken by OpenNet which shall be valid for a period of ten (10) Business Days (or such other time as may be agreed between the Parties) from the date they are notified to the Requesting Licensee by OpenNet;

(b) OpenNet shall obtain the prior approval of the Requesting Licensee to the written quotation under paragraph 1.2 (a)(ii). For the avoidance of doubt, the Requesting Licensee shall not be liable to bear any costs incurred by OpenNet under clause 1.2 unless the Requesting Licensee has given its prior approval under this clause 1.2(c)

- 1.3 The list of Central Offices and the technical specifications of the supplementary cooling system used is listed in Annex 12B. OpenNet may amend Annex 12B from time to time with the approval of the Authority.
- 1.4 Initially, information relating to procedures and forms for ordering Co-Location Supplementary Cooling Service, installation and physical access and an updated list of COs, including information on whether any of the listed COs has been earmarked for decommissioning, will be available on OpenNet's website, for access by the Requesting Licensee through secured means. The secured access to OpenNet's website will require the payment of a Per User Account Charge (specified in clause 14 of Schedule 15 (Charges)) for each user account created. The aforementioned information shall be made available on the OpenNet Platform in due course. For the avoidance of doubt, such Per User Account Charge shall not be re-imposed when the information relating to Mandated Services is made available on the OpenNet Platform.
- 1.5 OpenNet shall not be responsible for any damage to the Requesting Licensee's Co-Location Equipment caused by fire, water leakage, air-conditioning/mechanical ventilation failure, power fluctuation/interruption, or anything beyond OpenNet's control in the Central Office other than to the extent that it is the result of a grossly negligent, wilful or reckless breach of this ICO Agreement by OpenNet.
- 1.6 The timeframes in this Schedule relating to provisioning work for Co-Location Supplementary Cooling Service to be undertaken by OpenNet under clauses 3.5 (**Co-Location Supplementary Cooling Service Requests**) and 4.3 (**Project Studies**) are subject to delays caused by events outside OpenNet's reasonable control, in which case such failure to meet the timeframes shall not constitute a breach of this ICO Agreement and clause 1.7(a) shall not apply, provided that OpenNet must notify the Requesting Licensee as soon as practicable upon the occurrence of such event, stating the cause of the events and specifying a new date for completion of the relevant provisioning work which is extended for the period of such delays.
- 1.7 (a) OpenNet will provide the Service Level Guarantees in respect of provisioning of Co-Location Supplementary Cooling Service as set out in Annex 12A (**Provisioning SLG**). If OpenNet fails to meet any Service Level Guarantees applicable to this Schedule and the failure to meet such Service Level Guarantees is solely caused by OpenNet, its contractors and/or suppliers, OpenNet will provide a remedy to the Requesting Licensee in accordance with:

- (i) section 1 of Annex 12A and any terms and conditions contained therein in respect of Co-Location Supplementary Cooling Request timeframes;
- (ii) section 2 of Annex 12A and any terms and conditions contained therein in respect of Project Study timeframes;
- (iii) section 3 of Annex 12A in respect of claims made under Annex 12A.

The Requesting Licensee acknowledges that the relevant remedy provided under clause 1.7(a) is a genuine pre-estimate of the Requesting Licensee's loss and will be the sole and exclusive remedy available to the Requesting Licensee for such failure to meet the relevant Service Level Guarantees for Co-Location Supplementary Cooling Service and shall be OpenNet's sole and exclusive liability to the Requesting Licensee for such failure.

- 1.8 Requesting Licensee shall not bring in their own supplementary cooling system if OpenNet has deployed Co-Location Supplementary Cooling Service pursuant to this Schedule 12B.

## **2. AVAILABILITY AT A CENTRAL OFFICE**

- 2.1 The supplementary cooling solution requires a minimum heat load capacity per Central Office in order to operate. Any request for the Co-Location Supplementary Cooling Service will be assessed individually to determine if the technical requirements have been met prior to OpenNet confirming that the Co-Location Supplementary Cooling Service is available at the requested Central Office. For the avoidance of doubt, OpenNet shall only provide the Co-Location Supplementary Cooling Service only when the technical specifications specified in Table A in Annex 12D and Table B in Annex 12E are met for the respective Central Office.
- 2.2 Supplementary Cooling Service shall be implemented according to the technical specifications specified in Table A and Table B in Annex 12D and Annex 12E respectively. Supplementary Cooling Service does not have a redundant backup system.

### 3. ORDERING AND PROVISIONING PROCEDURE

- 3.1 OpenNet shall process requests for Co-Location Supplementary Cooling Service at a Central Office listed in Annex 12B (**Co-Location Supplementary Cooling Requests**) and allocate Co-Location Supplementary Cooling Service to Requesting Licensees in a non-discriminatory manner on a first-come-first-serve basis.
- 3.2 OpenNet shall process a maximum of sixteen (16) Co-Location Supplementary Cooling Requests per week from all Requesting Licensees (**Co-Location Supplementary Cooling Service Request Quota**). Any additional requests will be processed in the next available week where the Co-Location Supplementary Cooling Service Request Quota has not been exceeded. OpenNet shall inform the Requesting Licensee of that overflow within one (1) Business Day of the date of receiving the Co-Location Supplementary Cooling Request (**Request Date**).
- 3.3 The Requesting Licensee shall submit its Co-Location Supplementary Cooling Request using a Co-Location Supplementary Cooling Request Form in the form of Annex 12C containing but not limited to the following information:
- (a) the Central Office listed in Annex 12B at which Co-Location Supplementary Cooling Service is sought;
  - (b) the type of Co-Location Equipment proposed to be installed at the Co-Location Space that requires Supplementary Cooling Service;
  - (c) the number of supplementary cooling units required; and
  - (d) the Requesting Licensee's contact details.
- 3.4 Within one (1) Business Day of the date on which OpenNet receives the Co-Location Supplementary Cooling Request (**Request Date**) and subject to clause 3.2, OpenNet must notify the Requesting Licensee (and shall provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification) if its Request is rejected, for any one of the following reasons:
- (a) the Co-Location Supplementary Cooling Request is not in the prescribed form;

- (b) the Co-Location Supplementary Cooling Request does not contain the required information or the information provided is inaccurate or misleading;
- (c) OpenNet has plans or otherwise proposes to decommission the Central Office within six (6) months of the date of the Co-Location Supplementary Cooling Request; or
- (d) the Requesting Licensee has committed a material breach of the ICO Agreement or this Schedule.

3.5 Within five (5) Business Days of the Request Date and subject to clause 3.2, OpenNet must notify the Requesting Licensee (and shall provide the Requesting Licensee with a unique reference number or a similar form of identification in the notification) if its Request is accepted, or if rejected, for any one of the following reasons:

- (a) Requesting Licensee has not procured Co-location Space from OpenNet pursuant to Schedule 12;
- (b) Co-Location Supplementary Cooling Service at a Central Office is not available under clause 2;
- (c) there is insufficient space to install the supplementary cooling system;
- (d) the provision of Co-Location Supplementary Cooling Service at a Central Office will give rise to significant health, safety, technical or engineering issues; or
- (e) there are security and confidentiality requirements or restrictions imposed on OpenNet by Governmental Agencies.

Where OpenNet rejects the Co-Location Supplementary Cooling Request, OpenNet must provide reasons explaining the basis for rejection.

3.6 The Requesting Licensee shall be liable for and shall pay OpenNet the Co-Location Ordering Charge for processing the Co-Location Supplementary Cooling Request as provided in Schedule 15 (Charges), irrespective of the outcome of the Co-Location Supplementary Cooling Request, unless the Co-Location Supplementary Cooling Request was wrongfully rejected by OpenNet.

- 3.7 Where OpenNet is unable to offer the Co-Location Supplementary Cooling Service due to unavailability, OpenNet shall take reasonable measures to inform Requesting Licensee when the service is available.
- 3.8 The Requesting Licensee acknowledges that the Co-Location Space allocated and the actual placement of the Co-Location Supplementary Cooling equipment shall be determined by OpenNet. OpenNet is not obligated to place the same Requesting Licensee's Co-Located Equipment adjacent to each other, provided that OpenNet will use its reasonable endeavours to accommodate any reasonable request for adjacent placement made by the Requesting Licensee.

#### **4. PROJECT STUDY**

- 4.1 Subject to clause 3.2 and except where OpenNet has rejected a Co-Location Supplementary Cooling Request under clauses 3.4 and 3.5, OpenNet shall complete a Project Study within twenty (20) Business Days of the Request Date. The Requesting Licensee must pay the Project Study Fee specified in Schedule 15 (Charges). The Project Study normally entails a joint site survey with the Requesting Licensee to determine the space, placement of the supplementary cooling unit and Site Preparation Works required at the Co-Location space.
- 4.2 Following completion of the Project Study, OpenNet shall provide the Requesting Licensee with the following information ascertained as a result of the Project Study:
- (a) the placement of the supplementary cooling unit; and
  - (b) the number of Business Days reasonably expected to complete the Site Preparation Work.
- 4.3 OpenNet shall be entitled to levy and receive the Project Study Fee provided in Schedule 15 (Charges) irrespective of whether the Requesting Licensee proceeds with the Co-Location Supplementary Cooling Request after completion of the Project Study.

#### **5. SITE PREPARATION WORK**

- 5.1 Within ten (10) Business Days (or such other time as may be agreed between the Parties) from the date of notification of the result of the Project Study under clause 4.2, the Requesting Licensee shall confirm in writing whether it wishes to proceed with Co-Location Supplementary Cooling Service.



- 5.2 The Requesting Licensee shall pay OpenNet the Cancellation Fee provided in Schedule 15 (Charges) if the Requesting Licensee cancels the Co-Location Supplementary Cooling Request after their confirmation in 5.1.
- 5.3 OpenNet shall complete any Site Preparation Work within a period provided under clause 4.4 (b) from the date on which the Requesting Licensee notifies OpenNet under clause 5.1 that it wishes to proceed with Co-Location. If OpenNet is not able to complete the Site Preparation Work within the timeframe under this clause 5.3, OpenNet shall inform the Requesting Licensee of when the Site Preparation Work will be completed.
- 5.4 Within one (1) Business Day after the completion of the Site Preparation Work, OpenNet will notify the Requesting Licensee and request the Requesting Licensee to attend the Central Office for a final site inspection of the Co-Location Space.

**6. STANDARD TERMS AND CONDITION**

- 6.1 In addition to the terms and conditions of the Approved ICO and this Schedule 12B, the Requesting Licensee also agrees to comply with the following terms and conditions (where applicable)::
- (a) the specific terms and conditions for Supplementary Cooling Service at Central Offices except Tuas at Annex 12D and as amended by OpenNet from time to time;
  - (b) the specific terms and conditions for Supplementary Cooling Service at Tuas at Annex 12E and as amended by OpenNet from time to time;
- 6.2 Upon completion of the Site Preparation Work, the Requesting Licensee shall pay a Monthly Recurring Charge and Power Charge in accordance with Schedule 15 (Charges).
- 6.3 The charges in Schedule 15 may be revised if there are no requests or inadequate requests to implement the supplementary cooling system after one (1) year from the date of offer of ICO Schedule 12B.
- 6.4 The Requesting Licensee acknowledges that:
- (a) it will fully indemnify and hold OpenNet harmless at all times against all actions, claims, proceedings, costs (including legal costs), losses or

damages or expenses for injuries or death to any person whomsoever, which may be brought against OpenNet by any person out of or in connection with any loss or damage to any property, including third party equipment, resulting from the actions or omissions of the Requesting Licensee's employees or contractors;

- (b) it must comply with any guidelines on the operational use of Supplementary Cooling Service and for accessing and working in the Central Office issued by OpenNet from time to time;
- (c) it must maintain good engineering and operational practices in its use of its equipment; and
- (d) the technical means by which OpenNet supplies the Co-Location Supplementary Cooling Service is at OpenNet's sole discretion.

6.5 The Requesting Licensee shall, immediately on notice from OpenNet, remove from the Central Office any hardware, software or cabling component of the Requesting Licensee that OpenNet (in its sole discretion) considers may cause or is likely to cause a hazard, interference or obstruction to OpenNet's operation of the Central Office.

6.6 OpenNet shall be responsible for the maintenance of the supplementary cooling system installed under this Schedule.

6.7 If it is necessary to carry out any scheduled service interruption, including but not limited to planned repair, or replacement or upgrade to any equipment or facility forming part of the Co-Location Supplementary Cooling Service, OpenNet shall provide the Requesting Licensee with at least one (1) month's written notice in advance of such interruptions, repairs or upgrades, and shall inform Requesting Licensees of the period of service interruption. OpenNet shall take reasonable measures to minimise any service disruption to the Requesting Licensee. In the event of an unforeseen event that disrupt the service, OpenNet shall carry out emergency repairs to safeguard property and restore service. OpenNet shall notify Requesting Licensee during emergency outages.

6.8 OpenNet shall not be liable for any loss caused by such scheduled service interruption.

6.9 Requesting Licensee, at its sole cost, shall,

- (a) Notify OpenNet of any defects or problems discovered in the supplementary cooling service and provide OpenNet with the relevant information available pertaining to the defects or problems to facilitate correction or rectification;
  - (b) Not alter, modify or damage the supplementary cooling system in any way whatsoever or permit the supplementary cooling system to be altered, modified, damaged or combined with any other equipment or system not approved by the manufacturer and OpenNet. Any breach by Requesting Licensee of this Clause 6.7(b) shall be the responsibility of the Requesting Licensee. Requesting Licensee shall bear all costs associated therewith;
  - (c) Not request, permit or authorise any person other than OpenNet or its duly authorised agents to provide maintenance services (or any part thereof) for the supplementary cooling system;
  - (d) Provide adequate working space around the supplementary cooling unit for use by OpenNet or its duly authorised agents.
  - (e) Notify OpenNet of any malfunction, defects, failure or problems with the supplementary cooling system immediately upon Requesting Licensee becoming aware of same.
- 6.10 OpenNet reserves the right to make any modifications (which include installations, alterations, enhancement, upgrades or replacement works) (“Modifications”) to the supplementary cooling system/s or part thereof from time to time and OpenNet shall, where possible, use commercially reasonable endeavours to ensure the performance of the Supplementary Cooling Service is maintained.
- 6.11 OpenNet shall use commercially reasonable efforts to minimize the interruption, interference or impairment of the Supplementary Cooling Service caused by the implementation of any Modifications, but shall not be liable for any losses, damages or costs whatsoever that may be suffered or incurred by Requesting Licensee or any other person by reason thereof.
- 6.12 There shall be no compensation payable to Requesting Licensee and OpenNet shall not be liable to Requesting Licensee or any other person in the event of such supplementary cooling system(s) Modification.

6.13 At any time during the Term of License, a supplementary cooling system is deemed to have reached its End of Life (“End of Life”) if :-

- (a) it has reached the end of its useful economic life as advised by the supplementary cooling system(s) manufacturer; or
- (b) a major technical fault happens and it is no longer commercially viable to maintain the supplementary cooling system

## **7. FAULT REPORTING AND CLEARING**

7.1 It is the Requesting Licensee’s responsibility to determine the source of the fault at its own cost and to ensure that the fault does not lie within its own equipment before reporting the fault to OpenNet.

7.2 OpenNet may respond with an on-site service within the On-Site Response Time (as defined hereunder).

7.3 Subject to clause 6.7, where an on-Site service is required (each, a “Request”), OpenNet or its duly authorised agents shall respond on-Site to the Request within a target response time of four (4) hours (“On-Site Response Time”) from the time of the Request provided always that a Request is only valid and acceptable if it is made to and received by OpenNet via the designated Hotline by authorised personnel of Requesting Licensee.

7.4 The term “On-Site Response Time” means the target period of time within which OpenNet or its duly authorised agents are to arrive at the affected Site from the time of receipt by the Hotline of the Request by Requesting Licensee.

7.5 The time taken to resolve a fault request shall depend on the nature of the problem and the availability of any supplementary cooling system parts that require replacement.

7.6 OpenNet accepts no liability whatsoever for any loss or damage caused by the fault to the supplementary cooling system or any property of Requesting Licensee or any third party howsoever caused or arising.

## 8. TERM OF LICENCE

8.1 The term of a Co-Location Supplementary Cooling Service licence granted under this Schedule shall commence on the date of completion of the Site Preparation Work (**Commencement Date**) and continues for the term of eight (8) years , until the earlier of any of the following events:

- (a) either party terminates the Co-Location Supplementary Cooling Service in accordance with clause 9 and clause 8.2 of this Schedule;
- (b) the OpenNet ICO is revoked by the Authority under clause 12.8 of the ICO Agreement; or
- (c) the Authority removes the requirement for OpenNet to provide Co-Location Supplementary Cooling Service under the OpenNet ICO or exempts OpenNet from providing Co-Location Supplementary Cooling Service under clause 12.9 of the ICO Agreement.

8.2 During the Term of License, if any of or all the supplementary cooling systems reach their End of Life, OpenNet shall:

- (a) offer Requesting Licensee with prior reasonable notice the same or similar services as those contemplated under this Schedule 12B by using new, additional or replacement system/s on revised specifications, price, terms and conditions (“Offer”);
- (b) Inform Requesting Licensee of operational implementation assistance required from the Requesting Licensee to transit to the new, additional or replacement system/s.

Upon receipt of the Offer from OpenNet, Requesting Licensee shall, within 21 days thereof, either confirm acceptance of or reject the Offer. Any failure by Requesting Licensee to confirm or reject the Offer shall be deemed a rejection of the Offer by Requesting Licensee. Upon rejection of the Offer by Requesting Licensee, the licence of Co-Location Supplementary Cooling Service will be terminated and the last day of the licence of Co-Location Supplementary Cooling Service shall be the last day of the End of Life termination notice. Requesting Licensee shall be liable to and shall pay OpenNet the Monthly Recurring Charges and Power Charge specified in Schedule 15 (Charges) up to and including the last day of the End of Life termination notice and there shall be no refund of any monies paid by Requesting Licensee prior to or during the notice period.

8.3 The provision of the replacement service may be by the same vendor or another vendor who may not fully meet the same specifications; the same type of equipment may not be available in the market. The new solution may require different set of site condition for operations. Hence the revised offering is subjected to Central Office site conditions (eg. sufficient floor space and overhead space in the Co-location space, space in the rooftop and power in the Central Office), requirement and technology obsolescence and/or availability at the time of replacement.

## **9. SUSPENSION OF LICENCE**

9.1 OpenNet may suspend the Requesting Licensee's Co-Location Supplementary Cooling Service licence and Co-Location Service licence at any time until further notice to the Requesting Licensee if the Co-Location Equipment causes or is likely to cause physical or technical harm to the supplementary cooling system including but not limited to causing damage, interfering with or causing deterioration.

9.2 If the suspension is the result of the Requesting Licensee's fault:

- (a) the Requesting Licensee shall continue to pay the Monthly Recurring Charge and the Power Charge specified in Schedule 15 (Charges) during the period of suspension; and
- (b) OpenNet shall, upon the end of the suspension period, charge the Requesting Licensee a Reconnection Charge for the service reconnection works. OpenNet shall, within six (6) Business Days from the end of the suspension period, provide to the Requesting Licensee a written quotation for the Reconnection Charge. The Requesting Licensee shall, within ten (10) Business Days from the date of the quotation, inform OpenNet in writing whether it accepts the quotation. If the Requesting Licensee does not (for any reason whatsoever) reject the quotation in writing within ten (10) Business Days from the date of the quotation, OpenNet shall be entitled to proceed with the service reconnection works and recover from the Requesting Licensee the Reconnection Charge as set out in the quotation. The Requesting Licensee may, in order to facilitate the reconnection, at any time prior to the end of the suspension period choose to accept the Reconnection Charge that OpenNet will impose, without the need for a quotation by OpenNet.

9.3 Without limiting the exclusions or limitations of liability in this ICO Agreement, OpenNet shall not be liable to the Requesting Licensee for any Loss resulting from, or in connection with, suspension of access to Co-Location Supplementary Cooling Service under this clause 9.

## 10. TERMINATION OF LICENCE

10.1 Either Party (**Terminating Party**) may terminate the licence of Co-Location Supplementary Cooling Service:

- (a) if the other Party is in breach of this Schedule other than failure to pay any sum for which the Requesting Licensee has been invoiced, and such breach remains un-remedied for a period of sixty (60) Calendar Days after receiving notice from the Terminating Party; or
- (b) if the Requesting Licensee is in breach of this Schedule by its failure to pay any sum for which the Requesting Licensee has been invoiced, and such breach remains un-remedied for a period of fourteen (14) Calendar Days after receiving notice from the Terminating Party. For the avoidance of doubt, this sub-clause shall not apply pending the resolution of any Billing Dispute in accordance with the provisions of Schedule 16 (Billing).

10.2 OpenNet may immediately terminate a licence of Co-Location Supplementary Cooling Service if:

- (a) in OpenNet's reasonable opinion, the Requesting Licensee is using the Co-Location Supplementary Cooling Service in contravention of an applicable law, licence, code, regulation or direction and OpenNet has the necessary confirmation from the relevant Governmental Agencies that the Requesting Licensee is in contravention of the applicable law, licence, code, regulation or direction;
- (b) the Requesting Licensee's Co-Location Supplementary Cooling Service licence has been suspended pursuant to clause 8.1 of this Schedule, and the Requesting Licensee fails to rectify the fault resulting in the suspension within a period of sixty (60) Calendar Days from the date of suspension;
- (c) the Co-Location Supplementary Cooling Service is used for a purpose other than for Requesting Licensee's Co-Location Equipment;

- (d) the Co-Location Supplementary Cooling Service has become unsafe for its purpose;
- (e) the Central Office has become unfit for its purpose; or
- (f) OpenNet's right to own, maintain or operate the Central Office is revoked or terminates or expires.

10.3 OpenNet may terminate the licence of Co-Location Supplementary Cooling Service on ten (10) Business Days prior written notice, if the Requesting Licensee removes or abandons its Co-Location Equipment and the Requesting Licensee did not dispute such written notice by OpenNet.

10.4 If at any time during the term that the licence of a Co-Location Supplementary Cooling Service is to be terminated because of the closure of that Central Office, OpenNet must give the Requesting Licensee prior written notice at least eighteen (18) months before the scheduled closure of that Central Office. The Requesting Licensee shall bear its own cost associated with the closure of a Central Office. In the event that the Requesting Licensee requests assistance from OpenNet within thirty (30) Business Days after receiving a notice under this clause to provide an alternative solution to the Co-Location Space which is being terminated, OpenNet will use its reasonable endeavours in providing such assistance. The Requesting Licensee shall remain solely responsible for making any alternative arrangements as are necessary to continue to provide its Customers with services and shall remove its Co-Location Equipment prior to the closure of the Central Office.

10.5 The Requesting Licensee may terminate the Co-Location Supplementary Cooling Service licence by giving OpenNet at least one (1) month prior notice.

10.6 Upon expiry or termination of the licence of Co-Location Supplementary Cooling Service:

- (a) the Requesting Licensee must discontinue the use of its high heat load Co-Location Equipment and, at its own cost, remove its high heat load Co-Location Equipment from the Co-Location Space without undue delay. For the avoidance of doubt, high heat load Co-Location Equipment are Co-Location Equipment at the Co-Location Space that exceed the head load limit specified in clause 1.5.3 under Schedule 12;



- (b) OpenNet shall reinstate the Co-Location Space and recover/reinstate all cables/supports/opening and recover the cost of such reinstatement from the Requesting Licensee. OpenNet shall notify the Requesting Licensee of the costs payable by the Requesting Licensee prior to OpenNet's reinstatement of the Co-Location Space. The Requesting Licensee shall pay to OpenNet such costs notified to it by OpenNet. For the avoidance of doubt, OpenNet does not require the Requesting Licensee's approval of the costs, and may proceed to reinstate the Co-Location Space once it notifies the Requesting Licensee of the costs payable by the Requesting Licensee, other than in circumstances where the Requesting Licensee's discontinuation of the use of the Co-Location Equipment is a direct result of OpenNet's decommissioning of the Central Office under this Schedule 12, or where the termination occurs as a result of OpenNet's fault; and
- (c) the Requesting Licensee shall pay OpenNet the charges for Co-Location Supplementary Cooling Service for the remainder of the term of the Co-Location Supplementary Cooling Service licence if the termination is the result of the Requesting Licensee's fault.

10.7 If the Requesting Licensee fails to discontinue the use of its Co-Location Equipment and/or remove its Co-Location Equipment in accordance with clause 10.6(a), OpenNet may at its sole discretion proceed to remove and/or dispose of the Requesting Licensee's Co-Location Equipment. OpenNet shall notify the Requesting Licensee of the costs payable by the Requesting Licensee prior to OpenNet's removal and/or disposal of the Requesting Licensee's Co-Location Equipment. The Requesting Licensee shall pay to OpenNet such costs notified to it by OpenNet, including the cost of disposing the Co-Location Equipment. For the avoidance of doubt, OpenNet does not require the Requesting Licensee's approval of the costs, and may proceed to remove and/or dispose of the Requesting Licensee's Co-Location Equipment once it notifies the Requesting Licensee of the costs payable by the Requesting Licensee. In such event, the Requesting Licensee shall have no claim whatsoever against OpenNet related to or in connection with the work undertaken by OpenNet.

10.8 Upon termination of the licence of Co-Location Supplementary Cooling Service, the Requesting Licensee shall have physical access to the Central Office for a reasonable period, solely for the purposes of fulfilling its obligation under clause 10.6(a) to remove its Co-Location Equipment, after which any physical access granted to the Central Office shall also be terminated. The Requesting Licensee shall comply with all associated procedures for such physical access, and physical access charges shall apply.

**ANNEX 12A**

**SERVICE LEVEL GUARANTEES**

**1. REBATES FOR CO-LOCATION SUPPLEMENTARY COOLING REQUEST TIMEFRAMES**

OpenNet shall provide Service Level Guarantees in respect of the response to a request for Co-Location Supplementary Cooling Service within 5 Business Days from the date of the request.

<b>Missed notification timeframe as to response to Co-Location Supplementary Cooling Request following detailed processing (clause 3.6) by:</b>	<b>Rebate</b>
1-7 Calendar Days	50% x Project Study Fee
8-14 Calendar Days	75% x Project Study Fee
More than 14 Calendar Days	100% x Project Study Fee

**2. REBATES FOR PROJECT STUDY TIMEFRAMES**

OpenNet shall provide Service Level Guarantees in respect of the completion of Project Study within 20 Business Days from the date of the request.

<b>Missed timeframe for completion of Project Study (clause 4.1) by:</b>	<b>Rebate</b>
1-7 Calendar Days	50% x Project Study Fee
8-14 Calendar Days	75% x Project Study Fee
More than 14 Calendar Days	100% x Project Study Fee

**3. CLAIM PROCEDURES**

- (a) A claim by the Requesting Licensee shall be made in writing within thirty (30) Calendar Days of the completion of the relevant Calendar Month on which the Service Level Guarantees are measured. The amount in respect of any claim shall be paid to the Requesting Licensee in the form of a rebate. The Requesting Licensee acknowledges that a failure to make a claim within the specified timeframes under this paragraph means that the Requesting Licensee waives any entitlement to the Service Level Guarantee payment in respect of that claim.

- (b) If the Requesting Licensee is entitled to a rebate pursuant to the claim made hereunder, then the amount of the rebate will be credited into the Requesting Licensee's account after it has been processed by OpenNet and will be reflected in OpenNet's bill to the Requesting Licensee in accordance with OpenNet's billing cycle.
- (c) The guarantee and rebates provided by OpenNet under this Annex 12A are:
  - (i) of an ex-gratia nature and personal to the Requesting Licensee and are non-transferable; and
  - (ii) subject to this Schedule.
- (d) Despite anything to the contrary in this section, if the Requesting Licensee qualifies for any claim under this Annex 12A, OpenNet shall honour its obligations in respect of that claim but in the event of a dispute as to whether the Requesting Licensee qualifies for a claim or as to the quantum of the claim payable to the Requesting Licensee, the dispute shall be resolved in accordance with the Dispute Resolution Procedures in Schedule 17 of the ICO Agreement, or in the case of a Billing Dispute, in accordance with Schedule 16 of the ICO Agreement.

**ANNEX 12B**

**LIST OF CENTRAL OFFICES**

<b>Serial Number</b>	<b>Description of Central Office</b>	<b>Technical specifications for supplementary cooling system</b>
1	Tuas Telephone Exchange	Refer to technical specifications specified in Table B in Annex 12E
2	Jurong West Telephone Exchange	Refer to technical specifications specified in Table A in Annex 12D
3	Bukit Panjang Telephone Exchange	
4	Ayer Rajah Telephone Exchange	
5	Ang Mo Kio Telephone Exchange	
6	Orchard Telephone Exchange	
7	East Exchange	
8	Bedok Telephone Exchange	
9	Tampines Telephone Exchange	

ANNEX 12C

CO-LOCATION SUPPLEMENTARY COOLING SERVICE REQUEST FORM

REQUEST FOR CO-LOCATION SUPPLEMENTARY COOLING SERVICE

Date of Application : \_\_\_\_\_ Application Reference Number : \_\_\_\_\_  
Request is sought for the purpose of :  
Address of Co-Location space : [Address / Building Name]  
Type of Equipment to be installed that requires Supplementary Cooling Service  
: [Description / Manufacturer / Dimensions / Power Consumption / Heat Load/Rack Identifier (if existing racks)]  
Number of supplementary cooling units required : [Number]

Sign : \_\_\_\_\_ Name of Requesting Licensee: \_\_\_\_\_  
Name : \_\_\_\_\_ [Company Name]  
Designation : \_\_\_\_\_  
Contact Number : \_\_\_\_\_ Company Stamp : \_\_\_\_\_  
Fax Number : \_\_\_\_\_

Application returned – incomplete/illegible  
 Not Approved Reason for Rejection \_\_\_\_\_  
 Approved OpenNet Approval Code \_\_\_\_\_

Sign : \_\_\_\_\_ Contact Number : \_\_\_\_\_  
Name : \_\_\_\_\_ Fax Number : \_\_\_\_\_

Received Date : \_\_\_\_\_ Queue Status : \_\_\_\_\_ Processed Date : \_\_\_\_\_

**ANNEX 12D**

**SPECIFIC TERMS AND CONDITIONS FOR SUPPLEMENTARY COOLING SERVICE AT  
CENTRAL OFFICES EXCEPT TUAS**

1. OpenNet will use its best endeavors to complete the Service provisioning in accordance with the lead-time set out in Clause 4.4 (b). Requesting Licensee must not, in OpenNet’s sole opinion, cause or occasion any unnecessary delay to OpenNet’s commencement or completion of the Service provisioning. OpenNet reserves the right to, where any Service provisioning is not completed within the lead-time due to a delay caused or occasioned by Requesting Licensee, at its own discretion, impose the monthly recurring charges on Requesting Licensee from the date anticipated for the service commencement communicated to Requesting Licensee had the delay not occurred.
  
2. Requesting Licensee accepts and acknowledges that the supplementary cooling system has a set of environmental conditions and technical specifications specified by the manufacturer as set out in Table A.

Table A: Environmental Conditions and Technical Specifications

(i)	Minimum heat load required for supplementary cooling system in each Central Office except Tuas to operate	26kW
(ii)	Maximum heat load per rack each overhead unit can support up to	8kW
(iii)	Minimum number of overhead units per Central Office (except Tuas) for supplementary cooling system to operate	6
(iv)	Maximum number of overhead units per Central Office (except Tuas) offered in a non-discriminatory manner on a first-come-first-serve basis	16

Requesting Licensee acknowledges and accepts that all responsibility of ensuring that the supplementary cooling system is operated within the environmental conditions and parameters set out in Table C shall be borne by Requesting Licensee. OpenNet expressly disclaims all liability and obligation in relation to the maintenance of the Environmental Conditions and Parameters set out in this Clause 2 and Table A.

3. Requesting Licensee shall be fully responsible for any defect in the supplementary cooling system, caused or contributed to by the negligence or any other acts and omissions of Requesting Licensee, its officers, employees, directors, agents, contractors or assigns;
4. OpenNet accepts no responsibility for any loss or damage caused by or as a result of the use of the supplementary cooling system;
5. OpenNet may upgrade and/or replace the supplementary cooling system with other equipment and upon delivery of the replacement equipment; all relevant provisions in these Specific Terms and Conditions that are applicable to the supplementary cooling system shall apply to such replacement equipment.
6. Where Requesting Licensee requests that OpenNet provision the service within a specific period OpenNet shall, in consultation with Requesting Licensee, determine the RFS date to complete the work, as the service provisioning lead-time will vary, depending on the number of add-on units required per Co-Loc site. The indicative standard site preparation lead times are set out in the table below:-

<b>Service provisioning lead-time</b>	<b>Business Days</b>
Initial setup	90
Per overhead unit add-on per site	50

**ANNEX 12E**

**SPECIFIC TERMS AND CONDITIONS FOR SUPPLEMENTARY COOLING SERVICE AT TUAS**

1. OpenNet will use its best endeavors to complete the Service provisioning in accordance with the lead-time set out in Clause 4.4 (b). Requesting Licensee must not, in OpenNet’s sole opinion, cause or occasion any unnecessary delay to OpenNet’s commencement or completion of the Service provisioning. OpenNet reserves the right to, where any Service provisioning is not completed within the lead-time due to a delay caused or occasioned by Requesting Licensee, at its own discretion, impose the monthly recurring charges on Requesting Licensee from the date anticipated for the service commencement communicated to Requesting Licensee had the delay not occurred.
  
2. Requesting Licensee accepts and acknowledges that the supplementary cooling system has a set of environmental conditions and technical specifications specified by the manufacturer set out in Table B.

Table B: Environmental Conditions and Technical Specifications

(i)	Minimum heat load required for each supplementary cooling system in Tuas Central Office to operate	2.5kW
(ii)	Maximum heat load per rack each supplementary cooling system can support up to	10kW

Requesting Licensee acknowledges and accepts that all responsibility of ensuring that the supplementary cooling system is operated within the Environmental Conditions and Parameters set out in Table D shall be borne by Requesting Licensee. OpenNet expressly disclaims all liability and obligation in relation to the maintenance of the Environmental Conditions and Parameters set out in this Clause 4.3(b) and Table D.

3. Requesting Licensee shall be fully responsible for any defect in the supplementary cooling system, caused or contributed to by the negligence or any other acts and omissions of Requesting Licensee, its officers, employees, directors, agents, contractors or assigns;



4. OpenNet accepts no responsibility for any loss or damage caused by or as a result of the use of the supplementary cooling system; and
5. OpenNet may upgrade and/or replace the supplementary cooling system with other equipment and upon delivery of the replacement equipment; all relevant provisions in these Specific Terms and Conditions that are applicable to the supplementary cooling system shall apply to such replacement equipment.
6. Where Requesting Licensee requests that OpenNet provision the service within a specific period OpenNet shall, in consultation with Requesting Licensee, determine the RFS date to complete the work, as the service provisioning lead-time will vary, depending on the number of add-on units required per Co-Loc site. The indicative standard site preparation lead times are set out in the table below:-

<b>Service provisioning lead-time</b>	<b>Business Days</b>
Initial setup for each In-Row system in Tuas Co-loc site	90
Per each In-Row system add-on in Tuas Co-Loc site	90