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FIXED TELECOMMUNICATION NETWORK SERVICES LICENCE  
TELECOMMUNICATIONS ORDINANCE (Chapter 106)

In accordance with General Condition 20 of the Fixed Telecommunication Network Services Licence, Hong Kong Cable Television Limited (“HKC”) hereby publishes the tariffs under which it will provide the following telecommunication service with effect from 29th October 2004.

**Wholesale Internet Protocol Conveyance Service (the “Service”)**

(see Note 1)

**I. Introduction**

The Service uses HKC’s hybrid fibre coaxial cable (“HFC”) network and cable modem technology to convey Internet Protocol (“IP”) based packet transmission on a shared basis between a service provider (“Service Provider”) and the Service Provider's own customers that can be served by the Service. The Service is to be offered to Service Providers only. A Service Provider means a licensee under the Telecommunications Ordinance (Chapter 106). There are different types of service under the Service. The details of service description are set out in the Notes to the tariffs.

CMAL Line refers to Cable Modem Access Line. “\$” refers to Hong Kong dollars.

**II. Types of Service, charges and conditions of service**

Types of Service	Amount of charge	Conditions of service
Broadband IP Conveyance Service	<p><b>Monthly service charge:</b></p> <p>\$168 per month per CMAL Line (see Note 3)</p> <p><b>Associated charges:</b></p> <p>Monthly Port Charge: \$6,000 per month per OC-3 or GE interface set-up (see Note 3)</p> <p>Service Call Charge: \$600 per Service Call (see Note 3)</p> <p>Change of Service Configuration Charge (see Note 3):</p> <p>\$600 for Change of Service Configuration at the CPE POD (as defined in the Notes)(see Note 1 and 3) per each request for one CPE POD</p> <p>\$3,000 for Change of Service Configuration at the SP POD (as defined in the Notes)(see Note 1 and 3) per each request for one SP POD</p>	General Conditions of Service and Special Conditions of Service (see Note 2)

Types of Service	Amount of charge	Conditions of service
Voice-over-Internet Protocol (“VoIP”) Conveyance Service	<p><b>Monthly service charge:</b> \$42 per month per CMAL Line (see Note 3)</p> <p><b>Associated charges:</b> Monthly Port Charge: \$6,000 per month per OC-3 or GE interface set-up (see Note 3) Service Call Charge: \$600 per Service Call (see Note 3) Change of Service Configuration Charge (see Note 3): \$600 for Change of Service Configuration at the CPE POD (as defined in the Notes)(see Note 1 and 3) per each request for one CPE POD \$3,000 for Change of Service Configuration at the SP POD (as defined in the Notes)(see Note 1 and 3) per each request for one SP POD</p>	General Conditions of Service and Special Conditions of Service (see Note 2)

### III. Notes

#### 1. General Service description

The Service is restricted to the provision of wholesale IP conveyance service to a Service Provider, so that the Service Provider can package it as its own retail service offering to the Service Provider’s home user customers in residential buildings (“Subscribers”). For this purpose, “home user” means a Service Provider’s customer who uses the Service Provider’s retail service for non-commercial purposes, that is, normal residential usage.

The Service is to be offered to Service Providers only. The Service is for the conveyance of IP packet transmission between the home user and the Service Provider only; it does not permit direct conveyance of IP packet transmission within HKC’s network between home user to home user, nor one Service Provider to another Service Provider. Attempts to establish direct connection within HKC’s network, between home user and home user or between Service Provider and Service Provider will be considered as a breach of Service.

The Service is defined by the following attributes:

- (1) Downstream speed: This is the conveyance bit rate at which the type of Service will support in the direction towards the Subscriber from the Service Provider.
- (2) Upstream speed: This is the conveyance bit rate at which the type of Service will support in the direction towards the Service Provider from the Subscriber.
- (3) Priority level: This refers to the relative degree of Quality of Service. As that the Service is on a shared basis, Priority Level assigned to a particular type of Service will give conveyance packets of different types of Service different priorities – higher than or lower than other conveyance

packets, to access the shared media and shared resources. All users within the same priority level will use the Service on a best effort basis. Users with different priority levels will have higher or lower priority depending on the priority level assigned to the type of Service.

- (4) Usage Capacity: This is the limit or amount of usage measured in units of Bytes per month to which the Subscribers are allocated each month.
- (5) IP Address: This refers to the label which is assigned dynamically to an IP based device based on standard protocols such as DHCP.
- (6) Service Configuration: This is the definition of a particular Service type which is provisioned in accordance with defined service attributes. The service type can be defined with different upstream and downstream speeds, different level of priority, different usage capacity limits, different number of IP address assignments in accordance with different usage characteristics – that is narrowband, broadband, real time, constant bit rate, variable bit rate, etc..

Depending on the parameter settings of the Service attributes, different types of Service can be offered. The type of Service requested will be provisioned according to the type of Service attributes.

In these tariffs, a reference to HKC's lists of, for example, qualified or approved equipment, devices, technicians or contractors refers to such lists of HKC which are available on request by a Service Provider to HKC and which may be amended by HKC from time to time without any prior notice.

HKC will offer for the time being the following two types of Service:

**(I) Broadband IP Conveyance Service**

- (1) Downstream bandwidth: Up to 8 Mbps
- (2) Upstream bandwidth: Up to 1.5 Mbps
- (3) Priority level: Level 1 is the lowest priority and is on a best effort basis only – that is, no Quality of Service when compared with other priority levels.
- (4) Usage capacity: Up to 15 GByte per month
- (5) IP address: HKC administers one dynamic public IP address (which is to be provided by a Service Provider) and, when applicable, one dynamic private IP address in each case with a Time To Live (“TTL”) to be set by HKC.
- (6) Service configuration: For Internet Access service only, that is equivalent to residential Internet access usage. The service equipment of a Service Provider should be within the list of qualified equipment of HKC.

**(II) VoIP Conveyance Service**

- (1) Downstream bandwidth: Up to 96 Kbps
- (2) Upstream bandwidth: Up to 96 Kbps
- (3) Priority level: Level 3 has a higher priority than Level 1 and Level 2 but a lower priority than Level 4 and above – Level 3 has the Quality of Service which supports VoIP service.
- (4) Usage capacity: Up to 2 GByte per month
- (5) IP address: HKC administers two dynamic private IP address with a Time To Live (“TTL”) to be set by HKC.

- (6) Service configuration: For VoIP service only, that is equivalent to residential telephony traffic usage for one telephone line with one telephone number. The voice service equipment of a Service Provider should be within the list of qualified equipment of HKC.

Under the Service, there will be two main Points of Demarcation:

- (1) The first Point of Demarcation, Service Provider Point of Demarcation (“SP POD”), is situated at HKC's Network Operations Centre (“NOC”) (currently located at Cable TV Tower, 9 Hoi Shing Road, Tsuen Wan, Hong Kong and/or any other places which may be specified by HKC from time to time). The SP POD at the NOC serves to provide a service point of demarcation at which the Service Provider will bring its own facilities to HKC’s NOC and provide an agreed (OC-3 ATM or GE) interface setup to HKC’s service router. This service router (“Service Router”) will facilitate conveyance of traffic between the Service Provider and that Service Provider's Subscribers. This includes the traffic from a Service Provider to its Subscribers and the traffic from such Subscribers to the respective Service Provider. The present interface setup standard for the SP POD is either OC-3 ATM or GE. The Service Provider and HKC will agree on the interface setup to be used at the SP POD/NOC. HKC will provide one GE or OC-3 ATM port capacity for termination at the Service Router, at a charge specified in these tariffs.

**(A) Specification of the GE interface setup located in HKC NOC:**

The Service Provider shall supply, at its own cost, to HKC the GE interface setup – that is, GE terminating equipment that will be located at HKC’s NOC which will terminate at GE port provided by HKC. The GE terminating equipment shall follow the specification below:

**Cisco Catalyst 3750 routing switch Part Number: WS-C3750G-24TS-E (with the following features) or, subject to HKC’s approval, its equivalent**

- (i) 24 Ethernet 10/100/1000 ports and 4 small form-factor pluggable (SFP) transceiver-based Gigabit Ethernet ports
- (ii) 32-Gbps, high-speed stacking bus
- (iii) Innovative stacking technology
- (iv) 1.5 rack unit (RU) stackable multilayer switch
- (v) Capable of supporting enterprise-class intelligent services delivered to the network edge
- (vi) Installed with Enhanced Multilayer Image Software (EMI)
- (vii) Capable of full dynamic IP routing

**(B) Specification of the OC-3 ATM interface setup located at HKC NOC:**

ATM155 Multimode circuit which will terminate at OC-3 ATM Port provided by HKC.

For the avoidance of doubt, the GE or OC-3 ATM interface setup, though owned and supplied by the Service Provider, shall be managed by HKC. The Service Provider will conform to HKC requirements and complete HKC’s service acceptance testing prior to service turn up.

- (2) The Second Point of Demarcation, the Customer Premises Equipment Point of Demarcation (“CPE POD”), will be situated at the Subscribers’ specified premises. This is generally the point between HKC’s network and the drop cable leading into the Subscriber’s premises and this varies with the network configuration of the building concerned. The CPE POD must be connected to a Cable Modem Set. For the purpose of these tariffs, a Cable Modem Set (“Cable Modem Set”) means the appropriate type of

cable modem for the type of Service to be used, power adaptor, splitter, wall-plate, Ethernet cable and coaxial cable (which is in each case within the list of qualified equipment of HKC) and the cable modem which has the type approval of the Telecommunications Authority.

The installation of the Cable Modem Set shall be carried out by a Service Provider or its agents and in any case, the installation must be carried out by a competent person who is within the list of qualified technicians or contractors of HKC. If there is no Service readiness in relation to CPE POD and HKC's network, the Service Provider needs to carry out such work to facilitate Service readiness at its own expense and by its own staff or contractors who (or which) are in each case within the list of qualified technicians or contractors of HKC. For the purpose of these tariffs, Service readiness means existing end-to-end connection between the HKC's network and a Subscriber's premises.

For the avoidance of doubt, the cable modem, though owned and supplied by a Service Provider or its Subscriber, shall at all times be accessible by HKC through the CMAL Lines when connected to the CMAL Line. Access to the Service Provider's or the Subscriber's cable modem shall include but not limited to access for interacting with the cable modem; monitoring the cable modem; probing the cable modem; configuring the cable modem by any means of software, firmware, or hardware changes; and disabling the cable modem if abuse in usage, non-normal, unauthorized or illegal operations are detected. The Service Provider shall conform to HKC's requirements and inform HKC if changes are to be or have been made to the cable modem, after HKC provisions the ordered CMAL Line for that cable modem.

Under the Service, HKC will facilitate the conveyance of IP Packets between these two points of demarcation in accordance with the attributes of the type of Service ordered by a Service Provider. The virtual circuits between these two points of demarcation which the Service is comprised of, are referred to as CMAL Line. For avoidance of doubt, the term "CMAL Line" does not include a Cable Modem Set.

For the avoidance of doubt, different types of Services such as Broadband IP Conveyance Service and VoIP Conveyance Service can be provisioned for the same two points of demarcation at the same time with multiple CMAL lines – each supporting a type of Service, between the two points. Each virtual circuit CMAL Line will convey IP packets in accordance with the type of Service attributes. As a result, if a Service Provider offers its own retail packaged service, based on HKC's Broadband IP Conveyance Service and VoIP Conveyance Service, to its own Subscribers on two CMAL lines: one for Broadband IP Conveyance and one for VoIP Conveyance, the Service Provider will be charged accordingly for two CMAL Lines.

Except with the prior written approval of HKC, the Service is operated on the basis of one cable modem connected to any number of CMAL Lines provisioned in accordance with the type of Services ordered by a Service Provider. HKC will manage, maintain and determine IP address assignments for the IP devices for the Service (which are within HKC's list of qualified IP devices). HKC will manage, maintain, and determine those IP addresses to be provided by a Service Provider to HKC and for those IP addresses provided by HKC.

A Service Provider shall at the time of the signing of the agreement with HKC for the provision of the Service:

- (i) arrange and provide the agreed OC-3 ATM or GE interface setup at its own cost;
- (ii) arrange the associated transmission facilities at its own cost in relation to HKC's service router; and
- (iii) provide, at its own cost, the public IP addresses (where applicable) required by HKC to provision the type of Service to be ordered by the Service Provider.

For the time being, HKC only offers two types of Service under these tariffs: Broadband IP Conveyance Service and VoIP Conveyance Service. These two types of Service are provisioned to its own CMAL Line. The number of CMAL Lines, depending on the number of different types of Service ordered by a Service Provider between the SP POD and the CPE POD, are provisioned to terminate at one appropriate cable modem to be installed by the Service Provider at the Subscribers' residential premises. As part of the Service requirement, the appropriate cable modem shall interface with the following devices:

- (i) For Broadband IP Conveyance Service, the cable modem shall terminate at the Subscriber's personal computer; and
- (ii) For VoIP Conveyance Service, the cable modem shall terminate at one conventional residential telephone set.

A Service Provider will have to ensure that the appropriate type of cable modem for the type of Service is installed. For example, if VoIP Conveyance Service is requested, the Service Provider has to ensure that a cable modem with an Embedded Multimedia Terminal Adapter ("EMTA") is installed for that type of Service. All types of cable modems to be provided by a Service Provider for use in respect of the Service must have the type approval of the Telecommunications Authority and must be within the list of qualified equipment of HKC.

Although the Service may be capable of working with other device connected to the cable modem, if so connected by the Subscriber, the Service obligation will be limited to the use through the Subscriber's personal computer for Broadband IP Conveyance Service or residential telephone for VoIP Conveyance Service.

In relation to VoIP Conveyance Service, a Service Provider shall obtain its own number block from the Telecommunications Authority.

For the purpose of these tariffs, the term "downstream" refers to the transmission from SP POD to the cable modem and the term "upstream" refers to the transmission from the cable modem to SP POD. The type of Service is on a shared basis and actual upstream and downstream transmission throughput is subject to network condition and setting. HKC shall have the right to change software, firmware and configuration of the cable modem at any time to ensure proper interworking and operations between CMAL Line and the cable modem connected to the CMAL Line. HKC shall also have the right to monitor usage of the cable modem connected to the CMAL Line to ensure proper usage and interworking of the Service and to prevent unauthorized applications, abuse of system resources, and usage that is not normal to the Service. Since the service facilities are shared, service levels are not guaranteed. The Service will not support tunneling, MultiProtocol Label Switching ("MPLS"), or any other protocols between and within the two points of demarcation not approved or authorized by HKC. A Service Provider shall not, and shall not allow its Subscribers or any other persons to, engage in activities which result in change or alteration of traffic flow control of the Service established by HKC, for example, through bandwidth rate shaping, bandwidth prioritization or bandwidth hogging.

A Service Provider will have a commercial agreement based on these tariffs with HKC for the provision of the Service ("Agreement"). Use of the Service by a Service Provider and its Subscribers must comply with the attributes of the Service. For the avoidance of doubt, a Service Provider shall not, and the Service Provider shall not allow its Subscribers or any other person to, use the Service in breach of the service attributes in accordance with the type of Service ordered by the Service Provider.

## **2. Conditions of Service**

The provision of the Service is subject to the General Conditions of Service of HKC and Special Conditions of Service of HKC for the Service. For the avoidance of doubt, other than using the Service for offering retail service to its Subscribers, a Service Provider shall only use the Service for its own use and shall not offer or resell the Service to other persons whether at a charge or not.

Unless there is prior written permission of HKC, a Service Provider shall not use the Service, and shall not allow its Subscribers to use the Service, to provide commercial video service (including but not limited to pay television service) whether at a charge or not. A Service Provider shall bring to its Subscribers' attention of the relevant terms of the General Conditions of Service of HKC and Special Conditions of Service of HKC for the Service and to secure their compliance under the Service Provider's agreement with its Subscribers. The Service is made available subject to, among other things, the limitations in these tariffs.

### **3. Charges**

All references to "\$" are to Hong Kong dollars.

#### **3.1 *Minimum Order For Each Type Of Service***

The Service is subject to a requirement of minimum commitment of 25,000 CMAL Lines for each type of Service at any time. Each order of CMAL lines is subject to a minimum commitment period of three months.

#### **3.2 *Monthly service charge***

##### **(A) Broadband IP Conveyance Service**

HKC will provide Broadband IP Conveyance Service to a Service Provider at a service charge of \$168 per month per CMAL Line. Broadband IP Conveyance Service at the monthly service charge of \$168 is made available on the basis of one cable modem per CMAL Line. For the avoidance of doubt, the term "CMAL Line" does not include a Cable Modem Set. The minimum commitment period for a Service Provider for each CMAL Line is 3 months.

##### **(B) VoIP Conveyance Service**

HKC will provide VoIP Conveyance Service to a Service Provider at a service charge of \$42 per month per CMAL Line. VoIP Conveyance Service at the monthly service charge of \$42 is made available on the basis of one cable modem per CMAL Line and for one telephone number. For the avoidance of doubt, the term "CMAL Line" does not include a Cable Modem Set. The minimum commitment period for a Service Provider for each CMAL Line is 3 months.

##### **(C) Monthly Port Charge**

There is a Monthly Port Charge of \$6,000 per month per OC-3 or GE interface setup. Additional Ports for additional OC-3 or GE interface setup interface request by a Service Provider will also be at the charge of \$6,000 per month per Port.

A Service Provider may give instruction to HKC for an order of new CMAL Lines ("New CMAL Lines") and/or may continue its subscription of the existing CMAL Lines ("Existing CMAL Lines") in accordance with the type of Service requested by a Service Provider. Each order for New CMAL Lines for the Service is subject to the requirement of a minimum commitment period of 3 months. After the expiry of the minimum commitment period of 3 months, a Service Provider may, subject to the other provisions in these tariffs and upon the payment of the monthly service charge in advance, continue the subscription of a CMAL Line on a monthly basis for the type of Service requested by the Service Provider. For this purpose, all New CMAL Lines will, upon continuation of subscription after the expiry of the minimum commitment period, be regarded as Existing CMAL Lines.

For the avoidance of doubt, the costs of Cable Modem Set including the cost of appropriate cable modem, installation, Service readiness arrangements and the Service Provider's equipment which is directly and/or indirectly connected to CMAL Line shall be borne by a Service Provider.

#### **3.3 *Service Call Charge***

For the purpose of this charge, a Service Call means a request by a Service Provider to HKC to investigate any suspected fault. The Service Call Charge is \$600 per Service Call. The Service Call Charge will not be payable by a Service Provider if both of the following conditions are applicable:



(1) the fault is HKC's network related and (2) HKC needs to remedy the fault and carry out the repair work. The Service Call Charge only covers work relating to the investigation of the suspected fault. For the avoidance of doubt, if any fault is not attributable to HKC, HKC is not required to remedy the fault or carry out repair work.

### **3.4 Change of Service Configuration Charge**

Change of Service Configuration Charge is payable in case of a Change of Service Configuration. For the purpose of these tariffs, a change of Service configuration ("Change of Service Configuration") arises when there is a request from a Service Provider to HKC to make changes including but not limited to database updates, software and firmware updates (when applicable). For the avoidance of doubt, Change of Service Configuration work will not involve any field visit work by HKC.

If there is a Change of Service Configuration at the CPE POD upon request of a Service Provider, there will be a Change of Service Configuration Charge for the CPE POD of \$600 per each request for one CPE POD.

If there is a Change of Service Configuration at the SP POD upon request of a Service Provider, there will be a Change of Service Configuration Charge for the SP POD of \$3,000 per each request for one SP POD.

## **4. Placing of orders for CMAL Lines, provisioning lead-time and forecast of Service Provider**

### **CPE POD**

- 4.1 The normal provisioning lead-time of the Service for CPE POD is ten working days. The Service Provider shall provide to HKC CMAL Line order form information as specified by HKC.

### **SP POD**

- 4.2 The normal provisioning lead-time of the Service for the SP POD is 4 weeks after the date on which a Service Provider complies with all the following conditions:

- (a) the signing of the Agreement by a Service Provider with HKC;
- (b) the provision of the agreed interface setup to the Service Router by the Service Provider to HKC; and
- (c) the date on which the Service Provider completes the arrangement of the associated transmission facilities

and subject further to equipment availability and network compatibility.

- 4.3 A Service Provider shall provide forecast of its order of CMAL Lines as required by HKC.

- 4.4 A Service Provider has to ensure that :

- (a) it has to have its own public IP address (where applicable) which has to be provided to HKC at the time of the signing of the Agreement;
- (b) it has equipment that is within the list of qualified equipment of HKC and which is compatible with HKC's network; and
- (c) without limiting the generality of sub-paragraph (b) above, it and its Subscribers shall use the appropriate cable modem model which is within the list of qualified equipment of HKC.

## **V. Limitations**

- 5.1 The Service is made available on a best effort basis without any service level agreement. If there is any HKC's equipment failure or external attack to the network which affects the Service, HKC will repair such failure as soon as practicable. Under normal circumstances, target time to clear faults is within 48 hours of receiving necessary information from the Service Provider. For the

purpose of this paragraph, HKC's equipment shall mean "equipment which is provided by HKC for the provision of the Service to a Service Provider".

- 5.2 The Service is subject to, among other things, the availability of coverage, Service readiness and technical and other resource limitations, including but not limited to availability of capacity.
- 5.3 The Service is subject to outage arising from whatever reasons including but not limited to periodic maintenance and servicing.
- 5.4 For these tariffs, diversity and redundancy features for equipment, link, circuit, power, facilities and etc., are not included.
- 5.5 HKC reserves the right to apply extra charges for additional or non-standard facilities and services provided at the request of a Service Provider.

#### **VI. Termination of the Agreement and cancellation of CMAL Lines**

- 6.1 If a Service Provider will like to terminate the Agreement, it has to give at least one month written notice in advance to HKC.
- 6.2 If a Service Provider will like to cancel individual CMAL Line after the minimum commitment period of 3 months, it has to give at least one month written notice in advance to HKC.
- 6.3 Subject to paragraph 6.6 below, if HKC will like to terminate the Agreement, HKC will give one month written notice in advance to a Service Provider.
- 6.4 Subject to paragraph 6.6 below, if HKC will like to cancel individual CMAL Line after the minimum commitment period of 3 months, HKC will give one month written notice in advance to a Service Provider.
- 6.5 For the avoidance of doubt, HKC will not be required to refund any charge paid or any part of such charge paid by a Service Provider if a CMAL Line is cancelled or the Agreement is terminated by either the Service Provider or HKC at any time.
- 6.6 HKC shall be entitled to suspend the Service or terminate the Agreement or cancel individual CMAL Line immediately if a Service Provider is in breach of the Agreement, requirements in the tariffs, General Conditions of Service of HKC or Special Conditions of Service of HKC for the Service.

#### **VII. Normal office hours of HKC**

- 7.1 The normal office hours of HKC is:

Monday to Friday	9:00 am to 6:15 pm
Saturday	9:00 am to 1:00 pm

excluding gazetted public holidays in Hong Kong.

#### **VIII. Contact person for initiation of the Service**

- 8.1 Any party who is interested in the Service is requested to contact the following person of HKC for any enquiry concerning the initiation of the Service:

Manager, Carrier Services  
Hong Kong Cable Television Limited  
Cable TV Tower  
9 Hoi Shing Road  
Tsuen Wan  
Hong Kong

## HONG KONG CABLE TELEVISION LIMITED

### Special Conditions of Service for Wholesale Internet Protocol Conveyance Service

These terms and conditions form part of the agreement with HKC for the subscription of the Service. The Service is made available by HKC subject to, among other things, the tariffs for the Service, HKC's General Conditions of Service and these Special Conditions. If there is any inconsistency between HKC's General Conditions of Service and these Special Conditions, these Special Conditions shall prevail to the extent of the inconsistency.

All the definitions, notes (including but not limited to notes relating to the description of the Service), charges, provisions concerning placing of orders, provisioning lead-time, limitations and termination set out in the HKC's tariffs for Wholesale Internet Protocol Conveyance Service are deemed to be part of these Special Conditions as if they were set out herein.

#### Definitions:

1. In these terms and conditions, the terms below shall have the following meaning except otherwise stated or where the context otherwise requires:

“Agreement”	means the agreement between a Service Provider and HKC for the provision of the Service;
“Cable Modem”	means cable modem which is within the list of qualified equipment of HKC;
“Cable Modem Set”	means the appropriate type of cable modem for the type of Service to be used, power adaptor, splitter, wall-plate, Ethernet cable and coaxial cable (which is in each case within the list of qualified equipment of HKC) and the cable modem which has the type approval of the Telecommunications Authority;
“CMAL Line”	means the virtual circuits between the two points of demarcation, that is, the SP POD and CPE POD, which the Service is comprised of and for avoidance of doubt, the term “CMAL Line” does not include a Cable Modem Set;
“Content”	means any information or other material in whatever languages or forms (including all textual, audio, video, graphical, musical, still, telemetric and moving images);
“CPE POD”	means Customer Premises Equipment Point of Demarcation, that is, a point of demarcation situated at the Subscribers' specified premises and this is generally the point between HKC's network and the drop cable leading into the Subscriber's premises and this varies with the network configuration of the building concerned;
“Customer”	means a Service Provider who has entered into an agreement with HKC for the Service;
“Equipment”	means equipment (including but not limited to hardware, firmware and software relating thereto) which is provided by HKC for the provision of the Service to a Service Provider;
“Existing CMAL Lines”	means the CMAL Lines for which a Service Provider continues to subscribe after the minimum commitment period;
“HFC network”	means HKC's hybrid fibre coaxial cable network;
“HKC”	means Hong Kong Cable Television Limited;
“home user”	means a Service Provider's customer who uses the Service Provider's retail service for non-commercial purposes, that is, normal residential usage;

“IP”	means Internet Protocol;
“New CMAL Lines”	means new CMAL Lines ordered by a Service Provider;
“Service”	means Wholesale Internet Protocol Conveyance Service provided by HKC;
“Service Provider”	means a licensee under the Telecommunications Ordinance (Chapter 106);
“Service readiness”	means existing end-to-end connection between the HKC’s network and a Subscriber’s premises;
“Service Router”	means a service router which will facilitate conveyance of traffic between a Service Provider and that Service Provider's Subscribers;
“SP POD”	means Service Provider Point of Demarcation, that is, a service point of demarcation at which a Service Provider will bring its own facilities to HKC's Network Operations Centre and provide an agreed (OC-3 ATM or GE) interface setup to HKC’s service router;
“Subscribers”	means a Service Provider’s home user customers in residential buildings to whom the Service Provider offers its own retail service based on the Service;
“Telecommunications Authority”	means the Telecommunications Authority appointed under the Telecommunications Ordinance;
“\$”	means Hong Kong dollars.

### **Service**

2. For the avoidance of doubt, HKC reserves the right to refuse to accept an application for the Service from a Service Provider without providing any reason. A Service Provider shall bring to its Subscribers’ attention of the relevant terms of the General Conditions of Service of HKC and Special Conditions of Service of HKC for the Service. The Service Provider shall secure the Subscribers’ compliance of these terms through the Service Provider’s agreement with its Subscribers for the retail service based on the Service. Without limiting the generality of this clause, the Service Provider shall ensure that its Subscribers, in using the Service Provider’s retail service through the Service, will adhere to the intended usage as set out in the Service configuration of the type of Service ordered by the Service Provider.
3. The definition of the terms “Customer” and “Equipment” in the General Conditions of Service of HKC shall not be applicable to the Service. In relation to the Service, the definitions of these two terms in the General Conditions of Service of HKC shall be replaced by the definitions of the terms “Customer” and “Equipment” in these Special Conditions as if the definitions of the terms “Customer” and “Equipment” in these Special Conditions are included in the General Conditions of Service of HKC in the first place and the General Conditions of Service of HKC shall be interpreted accordingly. Clauses 3.2, 4.2, 4.3, 4.5(c), 5, 7.1, 7.2, 7.4, 8.3, 8.4, 8.6, 8.7, 9.3, 10, 12.2, 12.3, 13.3, 13.5 of the General Conditions of Service of HKC shall not be applicable to the Service.
4. HKC reserves the right to amend any term of these Special Conditions, General Conditions of Service of HKC and the tariffs at any time without notice. Accordingly, a Service Provider should consult these terms and conditions regularly to ensure its activities comply with the most recent version. The continued use of the Service by a Service Provider constitutes that Service Provider’s agreement to all such amended terms and conditions. A Service Provider shall pay on demand any increase in charges from the date when such increase shall have been lawfully made.
5. The Service is to be offered to Service Providers only. Without limiting the generality of the General Conditions of Service of HKC and other provisions of these Special Conditions, HKC shall be entitled to terminate the Agreement, suspend the Service and/or cancel any CMAL Line immediately without any compensation to a Service Provider:

- (a) if the Service Provider ceases to be a licensee under the Telecommunications Ordinance or if such licence of the Service Provider is suspended by the Telecommunications Authority; or
- (b) if a Service Provider is in breach of the Agreement, requirements in the tariffs for the Service, HKC's General Conditions of Service or these Special Conditions.

The Service is for the conveyance of IP packet transmission between the home user and the Service Provider only. The Service does not permit direct conveyance of IP packet transmission within HKC's network between home user to home user, nor one Service Provider to another Service Provider. Any attempts to establish direct connection within HKC's network, between home user and home user or between Service Provider and Service Provider will be considered as a breach of the Service.

6. A Service Provider shall only use the Service for its own use and shall not offer or resell the Service to other persons whether at a charge or not. Unless there is prior written permission of HKC, a Service Provider shall not use the Service, and shall not allow its Subscribers to use the Service, to provide commercial video service (including but not limited to pay television service) whether at a charge or not.
7. Each Service Provider acknowledges that the Service is a best effort service, the service facilities are shared and the service levels are not guaranteed.
8. A Service Provider shall be responsible for the installation, maintenance and repair of the Cable Modem Set and arranging Service readiness for the Service at its own expenses and a Service Provider shall seek the prior approval of HKC for any work for arranging Service readiness. In relation to VoIP Conveyance Service, a Service Provider shall obtain the number block from the Telecommunications Authority. The voice service equipment of a Service Provider should be within the list of qualified equipment of HKC.
9. HKC shall have the right to change software, firmware and configuration of the cable modem at any time to ensure proper interworking and operations between CMAL Line and the cable modem connected to the CMAL Line. HKC shall also have the right to monitor usage of the cable modem connected to the CMAL Line to ensure proper usage and interworking of the Service and to prevent unauthorized applications, abuse of system resources, and usage that is not normal to the Service. The Service will not support and a Service Provider shall not use, and shall procure its Subscribers not to use, tunneling, MultiProtocol Label Switching ("MPLS"), or any other protocols between and within the two points of demarcation not approved or authorized by HKC. A Service Provider shall not, and shall not allow its Subscribers or any other persons to, engage in activities which result in change or alteration of traffic flow control of the Service established by HKC, for example, through bandwidth rate shaping, bandwidth prioritization or bandwidth hogging.
10. Except with the prior written approval of HKC, the Service is operated on the basis of one cable modem for each CMAL Line.
11. The Service is subject to a requirement of minimum commitment of 25,000 CMAL Lines for each type of Service at any time. Each order for New CMAL Lines for the Service is subject to the requirement of a minimum commitment period of 3 months. After the expiry of the minimum commitment period of 3 months, a Service Provider may, subject to the other provisions in these tariffs and upon the payment of the monthly service charge in advance, continue the subscription of a CMAL Line on a monthly basis for the type of Service requested by the Service Provider. For this purpose, all New CMAL Lines will, upon continuation of subscription after the expiry of the minimum commitment period, be regarded as Existing CMAL Lines.
12. If a Service Provider would like to cancel a CMAL Line within the minimum commitment period, the Service Provider shall give at least one month written notice in advance to HKC. The Service Provider shall, at the time of delivery of the cancellation notice, enclose payment for the monthly service charge in respect of CMAL Lines ordered for the balance of the minimum commitment period.

13. The books and records of HKC shall be deemed as between HKC and a Service Provider to be conclusive evidence as to the Service provided, duration of the Service and the usage and other charges due and payable by the Service Provider to HKC from time to time.
14. If a Service Provider or its Subscribers use(s) the software HKC supplies to the Service Provider or its Subscribers for the purpose of accessing the Service on the Service Provider's or the Subscriber's computer, the Service Provider must, and shall procure its Subscribers to, comply with these terms and conditions and any software licence which accompanies the software.
15. A Service Provider agrees to notify HKC immediately of any unauthorized use of the Service or any other breach of security. HKC shall not be liable for any loss that the Service Provider may incur as a result of any unauthorized use of the Service, whether known or unknown to the Service Provider.
16. Without limiting the generality of the exclusion and limitation of liability in the General Terms and Conditions, a Service Provider acknowledges that the Service is limited to the conveyance of IP packet transmission only and HKC will not be liable to the Service Provider, its Subscribers or any other person:
  - (a) for any fault in the Service;
  - (b) for any failure or delay in providing the Service or in establishing or maintaining communication or other services between the Service Provider, its Subscribers and/or any other person whether such failure or delay arises from accident, omission, default, negligence or other act of HKC or its employee or from any other cause whatsoever; and
  - (c) by reason of any delay in effecting any repair or fault clearing in respect of the Service.

#### **Use of the Service**

17. Unless otherwise agreed by HKC in writing, a Service Provider is subscribing to the Service with no performance or reliability warranty either expressed or implied. The Service Provider shall provide customer service facility dealing with service complaint and to advise all its Subscribers that all their service complaints should be directed to the Service Provider and not to HKC. When the Service Provider receives service complaints from its Subscribers, the Service Provider shall, before passing on such complaints to HKC, determine to the best of its ability that the equipment and service supplied by the Service Provider is free from fault. The Service Provider shall ensure that fault complaint made to HKC is reasonably accurate description of the fault experienced.
18. A Service Provider will abide by all relevant laws, rules and guidelines relating to the use of the Service. The Service Provider will be responsible for its use of the Service. The Service Provider will not part with, transfer nor sub-license any of its rights to use the Service.
19. The Service Provider shall be solely responsible for the satisfactory operation of its service and equipment and for ensuring that such equipment is suitable for connecting to HKC's network and the Service without causing interference, disruption, disturbance or overloading of HKC's network or the Service. If connection to the Service Provider's equipment results in interference, disruption, disturbance or overloading of HKC's network or the Service, HKC may give the Service Provider written notice requiring it to acquire such reasonable number of additional services or take such other measures as in its opinion are necessary to alleviate such interference, disruption, disturbance or overloading. The Service Provider must use the Service in a responsible manner, taking into account the effects its use may have on other Service Providers and the Subscribers of the other Service Providers and HKC's system and network resources. Without limiting the generality of the foregoing, in using and accessing HKC's systems and network resources,
  - (a) The Service Provider shall not commit any act or conduct in contravention of these terms and conditions, in particular, shall not commit any of the prohibited activities set forth in Clauses 34 to 40 below;
  - (b) The Service Provider shall not abuse HKC's system resources as referred to in Clause 31 below;

- (c) A Service Provider's activity or usage must not improperly restrict, inhibit or degrade any other Service Provider's or Subscribers' use of the Service, HKC's systems and network facilities;
  - (d) A Service Provider's activity or usage must not improperly restrict, inhibit, disrupt, degrade or impede HKC's ability to deliver the Service or monitor the Service, backbone, network and bandwidth; or
  - (e) A Service Provider shall not engage in activity or usage which poses unusually large burden on HKC's network.
20. The Service must not be used in any way which may breach any confidence, copyright, intellectual property or other rights of HKC or any third party nor for any illegal, improper, immoral, defamatory, unsolicited advertising, or promotion purpose.
  21. A Service Provider acknowledges that HKC's affiliates, agents or contractors may provide any part of the Service or perform any of HKC's duties.
  22. HKC may change or withdraw any of the Service at any time. HKC may also suspend the Service at any time without notice for carrying out maintenance or other works to the system or network used in providing the Service.
  23. The Service together with all the software and equipment are supplied on an "as is" and "as available" basis. All conditions, warranties and responsibility in relation to the provision of the Service, the software, and equipment (including title, fitness for any particular purpose, merchantability, content, quality, non-infringement and accuracy) are excluded to the extent permitted by law. Use of the Service or any information obtained via the Service is at a Service Provider's own risk and the risk of its Subscribers.

#### **Use of Materials**

24. A Service Provider will not reverse engineer any Content or transmit any data that may cause damage to the computer equipment of any persons including uploading a program with a computer virus or any harmful software application.
25. A Service Provider will not nor allow others to copy, sub-license, distribute, sell, transfer, rent, exploit, alter, decompile, disassemble, tamper with, misuse, reverse engineer or repair any software, equipment, facilities and programming HKC supplies to the Service Provider.
26. A Service Provider is prohibited from storing, distributing or transmitting any unlawful or prohibited material through the Service. Examples of unlawful or prohibited material include direct threats of physical harm, pornographic material, and copyrighted, trademarked and other proprietary material used without proper authorization, and programs containing viruses or trojans and tools to compromise the security of other sites. The storage, distribution, or transmission of unlawful or prohibited materials could subject a Service Provider to criminal as well as civil liability, in addition to the actions outlined in Clauses 50 to 54 below.

#### **System Security**

27. A Service Provider is prohibited from utilizing the Service to compromise the security or tamper with HKC's system resources or accounts on any of HKC's computers, routers, terminal servers, modems, or any other equipment at HKC or at any other site. Use or distribution of tools designed for compromising security is prohibited. Examples of the tools include password guessing programs, cracking tools or network probing tools.
28. Without HKC's authorisation, a Service Provider will not, and will not allow others, to hack into, use or access (or attempt to do any of these) any part of the Service and Content on HKC's servers.
29. HKC reserves the right to release a Service Provider's information involved in violation of system security to system administrators at other sites, in order to assist them in resolving security incidents. HKC will also cooperate fully with law enforcement authorities in investigating suspected lawbreakers.

## **System and network resources**

30. HKC's system and network resources are shared amongst the Service Providers. Any unauthorized or improper use, either directly or indirectly, of HKC's system or network resources by one or more of the Service Providers may inhibit, restrict or degrade other Service Providers' use or access to such resources. To ensure equity of access to all Service Providers, and more importantly, to allow the best possible performance for the majority of the Service Providers, it is necessary for HKC to allocate HKC's system or network resources amongst the Service Providers and restrict or limit certain Service Providers' use or access to HKC's system or network resources. HKC therefore reserves the right to manage its system or network resources for the appropriate benefit of the number of the Service Providers using HKC's services, including but not limited to the right to control the traffic load of HKC's network. As part of resource management and allocation, HKC may limit, restrict or prioritize access to system or network resources, including CPU time, bandwidth, memory, disk space, session length, quality of service and the number of sessions. A Service Provider must accept and comply with such resource allocation and limitations on the Service. A Service Provider expressly acknowledges and accepts that such action on HKC's part may affect the performance of the Service.
31. The Service is designed for the provision of IP conveyance service by a Service Provider to home users at residential buildings. The service level enjoyed by individual Service Provider will to certain extent be affected by the number of Service Providers using the Service at the same time. Unless otherwise agreed in writing, HKC does not warrant or guarantee the upstream or downstream bandwidth available to individual Service Provider for the Service, whether expressed or implied. If HKC, in its sole judgement, considers that a Service Provider's use of the Service has consumed a bandwidth which may inhibit, restrict or degrade other Service Providers' use or enjoyment of the Service, upon the first detection of such usage behaviour, HKC will alert and warn the Service Provider and allow the Service Provider to rectify the problem. If the usage behaviour persists, as part of HKC's resource management outlined in Clause 30 above, HKC may, without prejudice to any other actions available to HKC as outlined in Clauses 50 to 54 below, restrict or limit the bandwidth available to the Service Provider to such rate for such period as HKC may in its absolute discretion consider fit and proper.
32. HKC may log instances of abuse of system resources. System abuse is defined as any use of HKC's resources which disrupts the normal use of its system or Internet services for others. Examples of system abuse include attempting to disrupt the sessions of other Service Providers and Internet users, consuming excessive amounts of time, memory or disk space bandwidth, quality of service or otherwise affecting the performance of HKC's servers or networks.
33. A Service Provider must not allow its Subscribers to run a server in connection with the Service, nor provide network services to others via the Service. Examples of prohibited uses include, but are not limited to, running servers for mail, http, ftp, irc and dhcp, usenet news, and multi-user interactive forums and private and public telecommunications services such as packetized voice telephony or video streaming or messaging.

## **Prohibited Activities**

The following activities are strictly prohibited:

34. Background and server-type applications IRC bots, HTTP servers, MUDs, and any other process which were initiated by a Service Provider or its Subscribers.
35. **Flooding or abuse of other users**

Flooding is a fairly common occurrence on the Internet. Flooding takes place in numerous ways, including ICMP flooding, mail bombing (sending large amounts of e-mail repeatedly to a person for purposes of harassment), mass mailings to multiple addressees, message flooding on IRC, as well as other less common methods.



36. **Attempts to compromise system or network security**

Programs such as packet sniffers, password crack programs, and similar utilities found to be originating from a Service Provider or a Subscriber are prohibited. This also includes attempts to hack into non-HKC systems.

37. **E-mail Abuse**

E-mail abuse typically comes in one of three forms, the transfer of a message to unsolicited individuals, the sending of harassing or threatening messages to other users, and the forging of e-mail addresses so as to make the e-mail appear to be from another user.

38. **Usenet order News Abuse**

Similar to e-mail abuse, includes forging of addresses, harassment/threats, the posting of the same message to multiple news groups (spamming), as well as the posting of information in groups where it is not relevant and unwanted.

39. **Pyramid/Money-Making schemes**

Such activities as the transfer of information or solicitation of persons via the Internet in attempt to extort money or other valuables or the use of pyramid/chain letters are all prohibited.

40. **Excessive load on infrastructure**

A Service Provider must not cause an excessive or disproportionate load on HKC's or any third party service providers' infrastructure.

**Charges**

41. HKC may, at any time, send a Service Provider an electronic statement showing the payments due. A hard copy of this statement will be available upon request and payment of HKC's handling charge. Any dispute over the statement must be raised within 21 days from the date of the statement, otherwise, the details and amount of fees contained therein shall be final and conclusive.

42. The fees for the Service must be paid in advance. HKC may charge interest at 2% per annum above the best lending rate quoted by The Hongkong and Shanghai Banking Corporation Limited from time to time on any outstanding fees. A Service Provider agrees that no credit or refund will be made in respect of any suspension or "downtime" of HKC's Service.

43. HKC may vary the rates charged to a Service Provider at any time.

**Personal Data**

44. HKC collects a Service Provider's personal data and that of the Subscribers in order to provide the Service Provider with the Service.

45. HKC will keep the Service Provider's personal data and that of the Subscribers confidential. HKC may provide it to third parties employed by HKC for the purpose of providing the Service. This may include any of the following services: on site services and maintenance. Third parties to whom the Service Provider's personal data and that of the Subscribers are provided can use the data only for the limited purpose for which it is provided.

46. HKC will also disclose the Service Provider's personal data and that of the Subscribers if HKC is required to do so by law and in order to assist in the detection or prevention of crime.

**Investigation**

47. HKC reserves the right to investigate suspected violations of these terms and conditions. When HKC becomes aware of possible violations, HKC may initiate investigation which may include gathering information from a Service Provider and the complaining party, if any, and examination of material on HKC's servers.

48. During an investigation, HKC may suspend the Service and disconnect a Service Provider's equipment and facilities and take any other action to protect the interest of HKC.
49. HKC will determine whether a Service Provider's activity or usage violates these terms and conditions on a case by case basis having regard to the actual circumstances of the individual case. Such circumstances may include (but not limited to) (a) a Service Provider's actual bandwidth usage in proportion to HKC's available network capacity; (b) any actual or potential disruption or impediment caused to other Service Provider's or the Subscribers' use of the Service; and (c) any complaint received from any third party.

#### **Remedies for Violation of these terms and conditions**

50. If HKC believes a violation of these terms and conditions has occurred, HKC will, at its sole discretion, determine what action will be taken in response to a violation on a case-by-case basis. Violation of these terms and conditions could also subject a Service Provider to criminal or civil liability.
51. The remedial action imposed on a Service Provider for violation of these terms and conditions will vary based on the level of the offence. Typically a Service Provider will receive a warning on the first offence. However, if the offence, in HKC's sole judgement, is severe, HKC reserves the right to disable the Service (in relation to the Service Provider and/or that of its Subscribers) immediately. Accounts which have been disabled by HKC will not be re-opened for the Service Provider. Other actions may include disconnection of the Service Provider's equipment and facilities, temporary or permanent removal of material from HKC's servers, the cancellation of news group posts, bandwidth limitation and the suspension or termination of the subscription involved. A Service Provider and/or Subscribers who are found to have committed any prohibited activities outlined in Clauses 34 to 40 above are subject to immediate termination of the Service and any and all criminal and civil penalties available under the law.
52. HKC will not reimburse or refund any prepayments to a Service Provider whose service was disabled, suspended or terminated due to any of the reasons listed above.
53. HKC may at its sole discretion reactivate the Service to a Service Provider if the Service Provider has remedied the breach and paid to HKC any administrative charge and security deposit HKC may require.
54. The Service Provider agrees to indemnify and hold HKC, HKC's officers, directors, shareholders, employees, agents, subsidiaries, and affiliates harmless from any and all claims and expenses related to libel, the Service Provider's violation of these terms and conditions, including but not limited to any abusive or unlawful behavior on the Service Provider's part, or the infringement of any intellectual property or privacy right of any person or entity (whether arising from the material transmitted or received via the Service) and against all other claims arising out of any act, omission or negligence of the Service Provider in connection with the Service.

#### **Disclaimer**

55. HKC, its affiliates, agents, contractors, employees and any other third party service providers will not be liable to a Service Provider whether in contract, tort, statute or otherwise for any direct, indirect, incidental, special, consequential or exemplary loss or damage which is suffered or incurred by the Service Provider arising out of the use of the Service, software or equipment or in any other way out of these terms and conditions.

#### **Others**

56. If a Service Provider terminates its subscription during any commitment period, HKC will not refund nor transfer any advance payment or fees paid by the Service Provider. Any notice of termination, to be effective, must be given in HKC's prescribed form.

57. **Force Majeure**

HKC will be excused from performance hereunder for any period and to the extent that it is prevented from performing, in whole or in part, under this agreement as a result of delays caused by the Service Provider or an act of God, war, civil disturbance, court order, adverse weather condition, labour dispute, third party nonperformance or other cause beyond HKC's reasonable control, including failures or fluctuations in electrical power, heat, light, air conditioning or telecommunications equipment, and such nonperformance shall not be a default hereunder or a ground for termination hereof.

58. The tariffs, General Conditions of Service of HKC and these Special Conditions are subject to the laws of Hong Kong Special Administrative Region and the parties submit to the exclusive jurisdiction of the courts of the Hong Kong Special Administrative Region.