

REFERENCE INTERCONNECT MODEL

The telecom sector is open to competition in Mauritius since January 2003. This entails a paradigm shift from an incumbent-centred telecommunications infrastructure provider to a multi-operator environment whereby a number of new networks are expected to be deployed for the provision of telecommunication services to the public. Such a situation is highly desirable and indeed being actively promoted by the Government and the Regulator given that the ICT sector at large and the public will reap the benefits of that competitive set-up.

The key to ensuring sustainable competition level is to define a proper Interconnection Regime in order to ensure a democratic access to the network owned by the incumbent operator. Interconnection agreements are required to be established between operators for physical and logical interconnections of their distinct networks. These would enable smooth operation of coordinated telecommunication activities in Mauritius. Such agreements need to be entered into between all types of operators such as basic, cellular mobile and international long distance operators.

The ICT Authority in its endeavour to ensure smooth implementation of the above is hereby proposing a Reference Interconnect model. This model is not conclusive and is subject to such modifications and amendments as may be deemed appropriate in the light of the expected response from the incumbent, prospective new entrants, as well as consumers and the public in general. The Authority accordingly invites comments and suggestions on this issue and would appreciate that same be communicated to it by 15th of February 2003 at latest. (Email: icta@intnet.mu)

A. Radhakisson
Chairman, ICT Authority

Draft Model Agreement

THIS AGREEMENT is made the day of between
....., a Company registered under the Companies Act, having
its registered office at....., hereinafter
referred to as Party, which term shall include, unless contrary to the context,
its successor in business, legal representatives and/or its assignees of the one part and
....., a Company registered under the Companies Act and having
its registered office at hereinafter
referred to as the Party....., which term shall include, unless contrary to the context,
its successor in business, legal representatives and/or assignees, of the other part, together
referred to as the Parties.

WHEREAS Party has been issued with a licence under the ICT Act 2001 to
establish, install and operate a/various Telecommunications system(s) (Licence
code(s):.....) for the provision of
Telecommunication service(s) over the territory of Mauritius; and

WHEREAS Party has been issued with a licence under the ICT Act 2001 to
establish, install and operate a/various Telecommunications system(s) (Licence
code(s):.....) for the provision of
Telecommunication service(s) over the territory of Mauritius; and

WHEREAS, in order to provide the specified range of services to their customers in their service
areas the Parties to the agreement are required to interconnect their networks,

NOW, THEREFORE, this Agreement, witnesses as follows:

1. SCOPE AND DEFINITION OF SERVICES

1.1 Scope and Definition

This agreement covers the technical and commercial arrangements for Interconnection between the network of and the network of and stipulates the conditions under which the respective networks of the Parties shall be interconnected to provide for exchange of uninterrupted telecom traffic and the manner in which interconnection and other mutually agreed services shall be provided and invoiced to each other subject to the terms and conditions of the Licenses issued by the ICT Authority under section 24 of the ICT Act 2001 and all other governing provisions of the law.

1.1.1 Definitions

Under this model agreement words and expressions which are not defined shall have the same meaning as assigned to them in the ICT Act.

- (i) “Acceptance” means an acceptance of the terms and conditions contained in the IOC either conditionally or unconditionally.
- (ii) “Guidelines” means the guidelines to IOC issued by the Authority and as amended from time to time.
- (iii) “Interconnection Provider” means a service provider to whose network an Interconnection is sought for the purpose of providing telecommunications services.
- (iv) “Interconnection Seeker” means a service provider who seeks interconnection to the network of the Interconnection Provider.
- (v) “Order” means an order made by the Authority pursuant to the powers granted to it under section 17 (3) of the Act.
- (vi) “The Regulation” means this regulation.

This agreement includes the following:

- (a) Physical Interconnection specifications between the two networks (Schedule 1).
- (b) Charges for Other Services wherever applicable (Schedule 2).
- (c) Charges for Sharing of Infrastructure Elements, wherever applicable (Schedule 3).
- (d) Applicable Technical Standards (Schedule 4).
- (e) Interconnect Unbundled Network Elements (Schedule 5).
- (f) Interconnect Usage Charges for Origination, Transit Traffic, and Termination (Schedule 6).

All attached Schedules and Annexes shall form part of this Agreement. In case of conflict or variance, the terms set out in the main body of the Agreement shall prevail.

1.2 Acceptance and Commencement

1.2.1 Acceptance of IOC

The Interconnection seeker shall notify the service provider of its acceptance to the IOC. An unconditional acceptance of the offer shall be followed by a formal agreement on the exact terms and conditions contained in the IOC.

1.2.2

An Interconnection seeker may also notify the service provider of its intention to negotiate an Individualised Agreement. In such a case the seeker may avail himself of the services required at prices, and on terms and conditions specified in this IOC on an interim basis pending the conclusion of the Individualised Agreement in the light further negotiations.

1.2.3 Commencement

This Agreement shall commence on and shall remain valid for a period of years, subject to the governing provisions under this agreement.

1.3 Amendments

No modification shall be brought to this Agreement or any of the annexed Schedules otherwise than by the mutual written consent of the parties with the formal approval of the Authority. Any amendment in the governing provisions of the law or regulations or conditions of this licence shall have immediate effect.

2. POINT OF INTERCONNECTION (POI) AND INTERCONNECTION PRINCIPLES

2.1 Point of Interconnection

- (a) The Parties agree to connect and keep connected their Systems at mutually agreed feasible Points of Interconnection set up in accordance with the Authority's determinations. Such interconnection shall be provided as determined under Section 3. The agreed POIs for each class of service are indicated in Schedule 1 of this agreement. This may be amended from time to time as required by mutual agreement with the approval of the Authority.
- (b) Party ----- agrees to supply the requested telecommunication services, facilities and information relating to interconnection, to the other Party as provided under this Agreement or otherwise mutually agreed and validated by the Authority. Such facilities

shall only be used for the agreed purpose and shall not be resold to other Parties. These Services and facilities are indicated in Schedule 2 and 3.

2.2 Traffic Routing Principles

Each Party shall carry calls offered by the other Party through its network up to the designated points. In case the call cannot be so carried due to temporary network conditions, suitable tones, announcements or notifications, as may be the case, shall be provided as agreed between the two Parties.

The levels and points at which interconnections may be provided for various classes of traffic shall be as per the terms and conditions of the License Agreements and Regulations of the Authority.

The Authority's IOC guidelines and Interconnection Tables given therein, as applicable, shall provide details on various interconnection and delivery of inter operator traffic and/or services.

2.3 Arrangements at the POI

The types of traffic to be carried across the POI are indicated in Schedule 1. Interconnection shall be based on SS7 to the extent possible, or any other ITU specified standard(s) for Region 1 as may be agreed by the Parties with the approval of the Authority. Other facilities and conditions at the POI shall conform to the standards in Schedules 2 and 4.

2.4 Co-location of Apparatus and Plant

To the extent possible, physical co-location of the Apparatus and Plant owned or leased by one Party and used for interconnection shall take place at the premises of the other Party.

Wherever such co-location has been mutually agreed essential accommodation and auxiliary infrastructure shall be made available for this purpose within the time schedules for interconnection. When a Party uses the premise and/or uses facilities of the other Party, it shall pay a rent to the other Party. Principles for deriving such rents are set out in Schedule 3.

3. INTERCONNECTION PROVISIONING PROCEDURES

3.1 Initial Demand

3.1.1 The Party seeking Interconnection shall provide relevant information 30 days in advance on the location of POI; estimated traffic in volumes or data rate capacity as may be appropriate and any other relevant technical information required to facilitate planning shall be provided.

A formal demand in writing indicating the number of ports/connection inlets and outlets, other facilities required, and the time schedule, shall be filed with the Interconnection provider.

- 3.1.2 The Interconnection provider shall within a period of 30 days from the date of receipt of such formal demand, either accept, or propose an alternative for meeting the demand fully or partially as well as specifying approximate dates for meeting the demand. He shall also issue the relevant demand notes for the accepted part of the demand within 30 days of receipt of the formal demand.

Where the Party ----- does not respond within 30 days, the formal demand will be deemed to have been accepted and the interconnection seeker shall be free to deposit the prescribed amount for the required number of ports/connection inlets and outlets. The date of such deposit shall be treated as the date of "Firm Demand". Such accepted demand shall be met within 6 months of such deposit, except for Interconnection with a minimum number of E1 ports required for the launch of the service, as ascertained by the interconnection provider, which shall be provided within 60 days of payment of the demand note, to the extent that such interconnection is technically feasible. Subsequent increase of interconnection circuits shall be based on actual traffic flow and growth pattern for an acceptable grade of service.

- 3.1.3 On the acceptance of the demand, in full or in part, the Interconnection Provider shall issue Demand Notes (Bill) within 30 days of the formal demand, for the capacity to be provided. The seeker shall then make the payment within 30 days of receipt of such Demand Note (Bill). The date of payment shall be the date of firm demand (The Date). Any change in the firm demand shall be entertained within 15 days of making the payment, after which no changes shall be allowed. The detailed payment procedure to be followed shall be laid down by the Coordination Committee as defined under section 15.

- 3.1.4 For the balance of requested capacity of ports not likely to be met within 6 months, planning action shall be immediately started. This shall be treated as firm demand for the next year and demand notes shall be issued accordingly.

- 3.2 Any dispute shall be referred to the Coordination Committee for resolution.

3.3 Provisioning, testing and Commissioning of Interconnect Circuits

- 3.3.1 The capacity made available within 90 days of the firm demand shall be taken up immediately for testing. The full capacity required shall be provided and made available for testing in accordance with the time schedule indicated in the acceptance of demand or demand note, which shall in no case be more than 6 month from the date of firm demand.

- 3.3.2 Where the demand is not met within the scheduled periods, the matter shall be submitted to the Coordination Committee for necessary action under this agreement.

- 3.3.3 The number of ports and access rates indicated in the firm demand for each POI will be the determining factor for the calculation of ports charges in terms of the Regulations.
- 3.3.4 Where the capacity provided is ready for testing, the party installing the equipment and requiring interconnectivity tests shall notify the other party accordingly. Both Parties shall to the extent possible ensure that the testing is completed within 30 days of provisioning.

3.4 Augmentation

- 3.4.1 Traffic measurements shall be taken by both Parties on agreed route busy hours for 7 days, 6 months after commencement of service and every six months thereafter with a view to determining further capacity requirements
- 3.4.2 Augmentation for additional capacity for the next 12 months shall be initiated by either Party on the basis of such traffic observation.

3.5 Cancellation Charges

- 3.5.1 Where the cancellation of demand is made within 15 days of the firm demand an amount equivalent to 15% of the annual rent payable for the capacity cancelled shall be payable as cancellation charge thereof.
- 3.5.2 Where the cancellation of demand is made more than 15 days after the firm demand the payment made towards port charges for the first year for the cancelled capacity shall be forfeited.

3.6 Utilisation

The Party seeking the interconnection shall undertake to use the capacity so made available for a minimum period of 3 years. If he fails to use the capacity, 50% of the rental for the unused capacity for the remaining guaranteed period shall be payable forthwith. A bank guarantee in an amount equivalent to 50% of the rental for the agreed period of shall be provided within 60 days from the date of confirmed demand.

3.7 Port Identification

Where a separate charging regime is applicable, the ports shall be separated and clearly identified.

3.8 Damages

Where within 6 months the Provider fails to make available the interconnect capacity in accordance with the firm demand or where the seeker is unable to put into place the required infrastructure for interconnection in terms of the firm demand, the failing Party shall pay Damages as calculated herein to the other Party;

- (a) 1% of the annual rent for each E1 port for each day of delay until the connection is made available for testing up to a maximum period of 60 days.
- (b) The payment of Liquidated Damages shall not release the defaulting party from the obligation to provide the ordered capacity, or meeting the agreed infrastructure specification, as may be the case.

4. NETWORK AND TRANSMISSION REQUIREMENTS

4.1 Traffic Forecasts

Traffic forecasts are used for the planning of sufficient switching and transmission capacity. Traffic forecasts shall be prepared and supplied by one Party to the other on the basis that:

- (a) The Parties shall forecast all outgoing traffic of each type, to the other Party's System for a period of one year at intervals of six months for each POI. These forecasts shall be made for the route busy hour. The first forecast shall be supplied within 90 days of the Effective Date and thereafter at regular interval of six months.
- (b) All traffic forecasts shall be in terms of Busy Hour Call Attempts. For these forecasts time consistent busy hour of the exchange and routes shall be determined.

4.2 Network Engineering

4.2.1 Diversity and Alternative Routing

Diversity may be provided by either Party in accordance with standard network engineering practices. In the case of partial segment failure, each Party shall extend the same priority to the traffic of the other party as it gives to its own traffic.

4.2.2 Circuit Provision

Circuit provision shall be made on the basis of an acceptable Grade of Service on the Network – Network Interface allowing for adequate safety margin to support momentary overloads.

4.2.3 Network Changes

The Parties shall inform each other wherever and to the extent possible, 6 months in advance, of any changes to network configuration and facilities that may have significant impact on the engineering of the other's network. Such changes shall not be effected without the prior approval of the Authority.

4.2.4 Caller Line Identification

CLI of the caller shall be transmitted to the receiving network whenever requested by that network in the course of the Signalling procedure and whenever technically possible.

4.3 Carrier Selection

Both Parties shall handle calls in accordance with the Regulations, procedures and guidelines of the Authority in relation to Carrier Selection. At the request of any Party the other Party shall supply information relating to its subscribers who have opted for a service offered by the former, or have requested for termination of such service.

5. TECHNICAL SERVICE COMMITMENTS AND FAULT REPAIRS

5.1 General Commitments

Each Party shall:

- 5.1.1 Be responsible for operating its own system and ensuring its safety
- 5.1.2 Ensure that the services it provides to the other Party are of the quality comparable to what it provides to itself and to its affiliates or subsidiaries or to any other recipient of its services.
- 5.1.3 Maintain and repair faults on Interconnection Links in the same manner as it maintains plant and repairs faults within its own Network.
- 5.1.4 The performance standards that shall apply for the various types of interconnecting links between two Networks are given in Schedule 1 and shall be binding on all the parties.

5.2 Quality of Service

The Parties shall ensure that the respective interconnect facilities delivered at each POI conform to the applicable QoS standards set out by competent Institutions (such as ITU, ERC, IEEE) as homologated by the Authority

5.3 Fault Reporting

- 5.3.1 Fault reporting mechanism for interconnect operational problems will be worked out jointly by both Parties and upgraded from time to time to reflect technological changes.
- 5.3.2 Each party shall advise its customers to report all faults to its own Fault Reporting Centre. If a fault report is received at an incorrect centre, the complainant shall be directed to the correct centre.
- 5.3.3 The party who first becomes aware of the fault shall promptly notify the fault to the other.

5.3.4 Where one party identifies a fault occurring in its system or where a major fault occurs that may have adverse effect on the other's party system the first will promptly inform the other party of the actions being taken to resolve that problem.

5.4 Network Restoration

The Parties shall manage their Networks to minimise disruption to services and in the event of interruption or failure of any services shall restore those services as soon as is reasonably practicable in accordance with the schedule set down by the Coordination Committee. Each Party shall manage, notify and correct faults arising in its Network, which affect the provision of any Services by the other party, as it would in the ordinary course for similar faults affecting the provision of services by itself.

5.5 Operating Instructions

The Parties will develop and record in the form of operating instructions, a series of agreed response times for different network fault conditions on the basis of the following principles:

- (a) Clearance of faults affecting the network shall have priority over the clearance of individual faults.
- (b) They shall automatically bring in any standby capacity available and/or carry out network management actions to restore service.
- (c) They shall observe equipment alarms and carry out testing to identify the nature and location of the fault in cooperation, as deemed necessary, with the other party.
- (d) They shall keep each other continually informed of progress on restoration of faults during a breakdown.
- (e) Where temporary repairs are made by one party, the other party must be informed accordingly. The other party shall also be informed of service impact of temporary repair and the estimated time of full restoration.

5.6 Planned Maintenance works

5.6.1 Each party shall give at least 7 days notice of any planned maintenance work that may affect the other party's system.

5.6.2 Each party shall make its best efforts to minimise disruption and where possible alternative routing shall be provided. Equipment design and link engineering shall have such redundancy that for any planned work the prescribed quality of service is maintained.

6. TECHNICAL SPECIFICATIONS AND STANDARDS

6.1 National standards

Interconnection of Networks and Systems shall conform to International Standards set out by internationally competent Institutions, as applied to Region 1 and homologated by the Authority.

6.2 Signalling and Synchronisation

Inter-network signalling shall be based on SS7 and E1 based PDH (Pleisochronous Digital Hierarchy) or SDH. The signal interchange points shall be those associated with the POIs.

6.3 Interface Approval

Neither Party shall connect or knowingly permit the connection to its System of any equipment that has not been approved by the competent authorities, or that do not meet the standard set by the relevant ETSI/CE Directives applicable in Mauritius.

6.4 Transmission and Performance Standards

6.4.1 Transmission Interface

The normal interface for network interconnection shall be at the E1 level. However, higher order interfaces may be permitted by mutual consent. N x 64 kbps is also permitted. ITU – T G series recommendations shall apply.

6.4.2 Switching

Switches shall conform to ITU – T Q series recommendations.

6.4.3 Packet Network

Packet Switches and interfacing elements shall conform to ITU – T H Series Recommendations

6.4.4 Speech Performance

Speech over the PSTN shall conform to the ITU – T P series recommendations.

6.4.5 PSTN/VOIP interoperability standards

Interoperability between circuit based switching and IP based networks shall be based on ITU – T H series recommendations and shall further conform to the guidelines and appropriate national standards set down by the Authority. Media gateway, Signalling Gateway and Gatekeeper shall conform to relevant ITU – T series recommendations and IETF standards.

7. NETWORK MANAGEMENT, MAINTENANCE AND MEASUREMENT

- 7.1 The Parties shall provide, install, test, make operational and maintain all interconnection facilities in their side of POI unless otherwise mutually agreed. The parties shall take full precautions to keep operational the equipment of other party installed in their premises for interconnect purpose and shall allow access to duly authorised representative of the other party to such equipment for provisioning, maintenance or monitoring purposes.
- 7.2 All measurements of calls and traffic and interconnect charges shall be related to the POI. Where such measurements cannot be made at the POI, a mutually agreed procedure shall be followed.
- 7.3 Each party shall employ its own network-specific Network Management System (NMS), with a view to ensuring efficient traffic and facility management of its own network. All required arrangements shall be made in order to prevent overload of other interconnecting systems.
- 7.4 The Network Management System employed shall be non-intrusive and to the extent possible ISO rated.
- 7.5 Each party shall prevent any signal from its network or the NMS from interfering with the other operator's network so as to maintain network integrity.
- 7.6 Each party shall make traffic and link measurements, and inform the other about any foreseeable or foreseen degradation in traffic performance, before it manifests through deterioration of QoS, to allow the other operator to initiate appropriate action for diversion or rerouting of traffic through the network of a third operator.
- 7.7 At every POI between the two networks congestion signal will be conveyed through SS7 wherever available.

7.8 IP Platforms

Each Party using IP based networks shall have a NMS based on the Open System Protocol (OSP) for interoperability of multi-operator networks.

8. NETWORK INTEGRITY, SAFETY AND PROTECTION

8.1 General Principles

The two parties agree to maintain network integrity and to take measures for adequate protection and safety. Integrity refers to the ability of the network system elements to preserve and retain their own original operational states and remain unaffected by interconnection with other networks.

8.2 Maintenance of Network Integrity

Each party shall ensure that:

- 8.2.1 adequate measures are taken to prevent the transmission of any signalling message across the connecting network which does not comply with inter-working specification;
- 8.2.2 efficient arrangement for screening functions and rejection of non-compliant messages are established to detect signals outside the inter-working specification.

8.3 Safety and Protection

- 8.3.1 Each party is responsible for the safe operation on its side of the network and shall so far as is reasonably practicable, take all necessary steps to ensure that its side of the network and its network operations:
 - (a) do not endanger the safety or health of any person, including the employees and contractors of the other party;
 - (b) do not cause physical or technical harm to the other party's network including but not limited to causing damage interfering with or causing deterioration in the first mentioned party's network.
- 8.3.2 It shall be ensured that in case the transmission of traffic to either party's network requires power feeding then not only the safety of the equipment shall be ensured but also that of the personnel maintaining it.

9. SPECIAL SERVICES

9.1 Assisted calls

Where the services of a party are used for completion of a special service call or for supply of information the party supplying the service shall be entitled to a fee for such service. This fee shall be mutually negotiated unless already specified in the Regulations.

9.2 Other facilities

Each party agrees to provide access to its services/facilities to the other party and its customers at fees/charges prescribed by the Authority for such service or otherwise mutually negotiated. All such fees for services and facilities shall be included under Schedules 2 and 3, which may be amended by the Authority from time to time as required.

10. ACCESS TO INTERCONNECTION GATEWAY FACILITIES

Any switch that is used for transiting traffic from one network to another in a multi-operator environment may be termed as an interconnection Transit Gateway. Functionality of such switches shall conform to the relevant ITU – T specifications, and to the guidelines and appropriate national standards set down by the Authority.

11. CHANGING MECHANISMS, BILLING AND SETTLEMENT

11.1 Subscriber Billing

Billing and revenue collection services to be provided by one party to another shall be carried in accordance with Licensing conditions as detailed in Schedule 2. The description and charges for such services are also contained in the same schedule.

11.2 Inter-Carrier Billing

Both Parties shall make arrangements for collection, storage and transfer of data relating to traffic passing through their network to facilitate inter-carrier charging and settlement.

Billing system may be based on Bulk Billing or where feasible on Call-by-Call basis with Call Data Records (CDRs). The transit switch generates CDRs, which is inputted to the Billing Systems.

For such CDR based systems, typically the following Carrier Related Information is required

- Identity of Originating Carrier
- Identity of Terminating Carrier
- Identity of Transit Carrier

The agreed formats for inter-carrier billing information / CDRs are given in an Annex (to be decided by both parties). Apart from transfer of information during the call, data may also be stored in appropriate CDRs.

11.3 Settlement

The interconnect usage charges (IUC) for originating, terminating and transit traffic payable by one party to the other are indicated in Schedule 6. This schedule also indicates which party is responsible for third party payments. These charges shall be subject to the Regulations.

11.4 Accounts

Each party shall send to the other a bill / invoice in respect of the previous month for the amount due for all effective traffic sent to or received from the other party. Effective Traffic for this purpose would mean answered calls. This bill / invoice shall be sent within 7 calendar days after

the close of the month for which the bill / invoice is made. The determination of the amount due shall include:

- (c) The amount of POI wise traffic in minutes or call units as is applicable, handled during the month, broken down by the type of traffic (domestic, international etc. as feasible) and
- (d) The payable amount for such traffic shall be calculated at the rates given in schedule 6.

In addition, the due amounts for other services and network elements (refer to Schedules 2 and 3) shall also be presented wherever applicable.

Each party shall be responsible fully for the taxes, if any, imposed by the Government or any other authority in this regard.

11.5 Payments

11.5.1 The net amount for each billing period shall be remitted by the concerned Party to the other within fifteen (15) days following the receipts by both Parties (the “due date”).

11.5.2 Any payment not effected by the due date shall bear punitive interest at an agreed rate in terms of Schedule 7. This interest calculated from the due date until the date of payment, shall be payable to the concerned party.

11.5.3 If any party issuing the bill subsequently finds that some charges have been omitted from the bill issued, he may include the omitted charges in the subsequent bills at any time, but not later than six months from the date of issue of the relevant bill except in cases where additional billing becomes necessary due to the tariffs / rate changes notified by the appropriate authority subsequently.

11.6 Errors and Reconciliation

11.6.1 Where either Party discovers an error in the reports, it shall promptly notify the other Party, and in any case not later than 3 months from the date of issue of the Bill, and the Parties shall make such adjustments in accounts as are necessary to correct the error.

11.6.2 Where any dispute arises between the parties regarding the accuracy of the traffic information or any related matter, the same shall be referred to the Coordination Committee for reconciliation and settlement of accounts. The determination of the coordination committee shall be restricted to disputed amount only and the undisputed amount(s) shall be settled promptly.

Where the undisputed amount is less than 2% of the total claim the full amount shall be settled pending the determination of the coordination committee. Where no reconciliation is possible it shall be competent for the Parties to jointly select an auditor to assist in the resolution of the dispute.

Where the Parties cannot agree on the auditor to be appointed they may apply to the Authority for its intervention and in such a case the decision of the Authority shall be binding on both parties.

All related costs shall be borne by both parties. The amount payable after reconciliation will carry interest from the due date at the rate of interest specified in Schedule 7.

Under no circumstances shall any of the parties plead set-off or compensation in respect of a claim arising under this section.

11.7 Security Deposits

Parties shall be entitled to demand Security Deposits/Bank Guarantees in accordance with the procedure laid down in the Annexes. This is in addition to the other payable amounts prescribed under this agreement.

11.8 Fraud and Default

The Parties shall cooperate with each other to investigate, minimise and take corrective action in cases of fraud. Subject to applicable laws, information concerning defaulting customers may be supplied by one party to the other.

12 COMMERCIAL TERMS AND CONDITIONS

12.1 Supply of Service

The Parties agree to supply the services and facilities listed in Schedules 2, 3 and 6 at the listed prices. These lists shall be prepared in accordance with the Regulations of the Authority wherever applicable. If not so listed, they shall be determined on the basis of the costing principles indicated in the Interconnection Regulations. The terms and conditions under which such services / facilities are to be supplied shall also be included in the schedule. Such facilities shall only be used for the agreed purpose, and shall not be resold to the other Parties unless agreed otherwise mutually. These facilities shall not be used for bypass of traffic.

12.2 Third Party Rights

This agreement is intended to apply to the provision of facilities and services by one **party** to the other and shall not be construed as conferring rights of any nature on any third **Party**.

12.3 Cost of Interconnection

12.3.1 The cost of upgrading / modifying interconnecting networks to meet the service requirements of the service shall be met by the Party seeking interconnection. However

mutually negotiated sharing arrangements for cost of upgrading / modifying interconnecting networks between the service providers shall be permitted.

12.3.2 Two years after the initial interconnection is established, the issue as to who bears the cost of additional resources required shall be negotiated between the service providers. The general principle followed in these negotiations is that each party should bear the incremental costs incurred for the additional ports required for meeting the QOS standards relating to its outgoing traffic to the other party.

12.4 Upgrading

Any upgrading of network required to meet National Standards and guidelines set down by the Authority shall be carried out by each party at his own cost.

12.5 Exclusivity

The Parties may interconnect with any other licensed Party in Mauritius according to the terms and conditions set out in their respective licenses. Neither Party shall require the other to interconnect to its facilities on an exclusive basis.

12.6 Emergency Services

Access to emergency services of each Party as specified in Schedule 2 shall be provided by mutual agreement.

12.7 Applicable Law

This Agreement shall be governed by and construed in accordance with the laws of the Republic of Mauritius.

12.8 Assignability

Neither this Agreement nor any of the rights, interest or obligations hereunder shall be assigned by any Party without the prior written consent of the other Party hereto.

12.9 Language

This Agreement has been executed in the English Language, which shall be the binding, and controlling language for all matters relating to the meaning or interpretation of this Agreement.

12.10 Waivers

The waiver of the rights derived from this Agreement shall only be effective if communicated in writing to the other Party. No failure on the part of any Party to exercise any right, power or privilege under this Agreement shall operate as a waiver hereof.

12.11 Partial Invalidity

Where any provision or obligation under this Agreement is considered invalid, illegal or unenforceable by a court of competent jurisdiction, such judicial decision must, as regards such invalidity, be interpreted as being strictly applicable to the provision or obligation subject matter of the judicial determination only and shall not affect or impair the validity, legality or enforceability of any other provision in or obligation under this Agreement.

12.12 Non-Discrimination

Service providers shall not, in the matter of interconnection charges, discriminate between service providers except on the basis of substantial cost-differential.

For considering the cost herein the factors like volume of traffic etc., which have direct bearing on the charges of interconnection shall be taken into account.

13 INTERCONNECTION USAGE CHARGE (IUC)

13.1 Type of Charge: These are of the following types

- (a) One time set up charge for establishing/augmenting specific interconnect facilities for example, all hardware/software modifications required to interconnect the network of the two parties for handling each other's traffic.
- (b) Rental charges for use of Ports and Interconnect links and other facilities.
- (c) Usage charges for use of network elements of one party by the other party for carriage of traffic.

13.2 Set Up Charges

Set up charges shall be determined as per the Regulation. Where major reconfigurations of plant are required the cost charged to the other Party shall be in proportion to the asset being requested/provided to that Party.

13.3 Usage Charges

For the determination of usage charges for carriage of each other's traffic, both parties shall furnish the details of their network elements cost as detailed in Schedule 5 to the Authority. The Unbundled Network Element costs of both switching and transmission shall be worked out in sufficient details so that usage charges for various types of interconnections may be calculated based on various types of switches and transmission elements involved in call conveyance. These costs shall form the basis of the IUC for various types of calls and these shall be entered in Schedule 6. Unbundled telecom network cost shall be based on the principle of Fully Allocated Current Cost (FAC).

15. CONFIDENTIALITY, LIABILITY AND INDEMNITIES

15.1 Each **Party** may disclose to the other **Party** such proprietary and confidential (technical or business) information in written, oral, graphic or any other forms, as may be agreed to, for the purposes of this agreement only.

15.2 Each **Party** shall guarantee that the equipment / systems and other articles of the service commissioned / provided by it for the purpose of interconnection or usage by the other **Party** in terms of this agreement, does not infringe any copy-right or trademark or on intellectual property rights of any third party.

15.3 Either **Party** must not use a trademark, service marks or trade names belonging to another **Party** as a trademark, service marks or trade names without the prior written consent of the other **Party**.

15.4 The conveyance of information between----- and-----which shall take place, shall not constitute or imply the granting of any rights under any copy right, patent, trademark or any other Intellectual property rights either at the time of conveyance or subsequently.

15.5 Except as otherwise provided in this agreement, either **Party** may not disclose the confidential information except in the following circumstances: -

(a)

the disclosure is authorised in writing by the **Party**, to the extent so authorised; or

(b)

the disclosure is made to any arbitrator or expert appointed to resolve disputes under this agreement; or

(c)

the disclosure is made pursuant to any applicable laws, rules, regulations or directions of a statutory or regulatory authority or order of a court of law of competent jurisdiction.

15.6 Each **Party** to the agreement shall inform the other **Party** of any disclosures made to third **Party** prior to any such disclosure.

15.7 Each **Party** to the agreement shall ensure that the information provided by one **Party** to the other is used solely for the purposes for which it is disclosed.

15.8 In order to protect such confidential information from improper disclosure, both **Parties** agree to limit access to such confidential information to authorised employees/agents who have a need to know the confidential information for performance of this Agreement and to use such confidential information only for purposes of fulfilling work or services relating to this agreement.

The authorised employees/agent to whom all or any confidential information is disclosed shall hold it strictly confidential and shall not disclose it to any other person. Each **Party** shall be liable for any disclosure by the authorised person(s) to any other person.

15.9 Neither **Party** shall be liable to indemnify the other for any claim, demand or proceeding by any third party asserting that the use of any circuit, apparatus, or system or software, or the performance of any service by either **Party** under this agreement constitute infringement, or misuse of any patent, copyright or any other proprietary or intellectual property right of any third party.

15.10 All written confidential information or any part thereof (including, written information incorporated in computer software or held in electronic storage media) together with any analysis, compilations, studies, reports or other documents or materials prepared by the receiving **Party** or on its behalf, that reflect or are prepared from any of the confidential information provided by the disclosing **Party** shall be returned to the disclosing **Party** or destroyed by the receiving **Party**, when requested by the disclosing Party at any time, or when this agreement expires or is terminated, whichever is earlier. In the event of destruction, the receiving **Party** shall certify in writing to the disclosing **Party** within thirty (30) calendar days, that such destruction has been accomplished. The receiving **Party** shall make no further use of such confidential information nor retain such confidential information in any form whatsoever.

15.11 The **Parties** acknowledge that the provisions of this part shall continue in full force and effect regardless of variations, assignments or termination of other provisions of this agreement. The obligation to maintain confidentiality of the confidential information provided hereof and the undertakings and obligations in this part shall continue for two (2) years upon the expiry or termination of this agreement.

15.12 Notwithstanding any provision in this agreement and unless otherwise provided the **Parties** shall not reveal, make known or divulge to any third party in any manner howsoever the contents of those aspects of this agreement (in full or in part) which the Authority has withheld from publication.

15.13 Save as provided under this agreement, no news releases, public announcements or any other form of publicity concerning this agreement or the terms of this agreement shall be conducted or released by the either **Party** without the prior written consent of the other **Party**.

15.14 Each **Party** acknowledges that a breach of any provision of this chapter may cause the other **Party** damage.

15.15 The agreement contains the entire understanding between the **Parties** with respect to the safeguarding of the confidential information and supersedes all prior communications and understandings with respect thereto.

15.16 Force Majeure

Neither party shall be liable for any breach of this Agreement (other than a breach for non payment) caused by an act of God, insurrection or civil disorder, war or military operations, national emergency, fire, flood, lightning, explosion, subsidence, industrial dispute of any kind. The Party affected by such force majeure shall promptly notify the other Party of the conditions and the details thereof. If as a result of force majeure, the performance by other Party of its obligation under this agreement is only partially affected, such Party shall nevertheless remain

liable for the performance of those obligations not affected by such force majeure. If the force majeure lasts for more than the continuous period of 90 calendar days from the date of the notification, and continues to prevent the affected Party from performing its obligation in a whole or in material part, the affected Party shall be entitled to, but not be obliged to, terminate its agreement by giving not less than 30 calendar days written notice to the other Party. This will be subject to the Articles on Termination.

15. LIAISON AND COORDINATION

A Coordination Committee consisting of both Parties shall coordinate all mutual activities relating to implementation of interconnection, amendment of schedules, reconciliation of accounts etc. and lay down the detailed procedures required for smooth implementation of the agreements. A copy of the minutes of all meetings held shall be filed with the Authority for proper monitoring. Sub-committee(s) may be set up by the Coordination Committee as and when required.

16. TERMINATION AND REVIEW

16.1.1 This agreement shall continue for the period indicated in subsection 1.2 unless:

- (a) either **Party** ceases to hold a license under the ICT Act.
- (b) a winding-up or dissolution order is made by a court of competent jurisdiction in respect of any of the parties;

in which case this Agreement shall be immediately terminated.

16.1.2 This Agreement may also be terminated by either Party giving 30 Days notice to the other in the event the other Party:

- (a) breaches any provision of this Agreement; provided, however, that the breaching Party shall have been notified in writing of its failure by the non-breaching Party and that the breaching Party shall have failed to remedy its failure within twenty (20) Working Days of such notification; and the approval of the authority and the licensor has been obtained for such termination. In the event, the approval is accorded with conditions, regard being had to the general interest of the customers, the same will be fully complied with before the final act of disconnection of interconnection arrangements becomes effective. Provided, however, in the event no intervention is made by the Regulator / Licensor during the notice period, the approval of the authority shall be deemed to have been accorded;
- (b) ceases to carry on business.

16.1.3 Each Party shall provide assistance as is necessary for recovery by the other Party of any equipment supplied by that other Party.

16.1.4 Termination of this Agreement shall be without prejudice to a Party's rights, liabilities or obligations that may have accrued prior to such termination.

16.2 Withdrawal of Interconnection for non-payment

In case of default in payment, the creditor Party may immediately approach the Regulator/Licenser for withdrawal of services, provided that the remedy to appropriate the security deposit has been exhausted or there exists some such circumstances, which warrant immediate suspension. This will be in addition to other remedies available under the contract. Provided, however, in the event no intervention is made by the Regulator/Licenser during the notice period, the approval of the authority shall be deemed to have been accorded.

16.3 Review

Apart from changes to Schedules and annexes that may be made at any time by mutual agreement, this Agreement may be taken up for Review by Mutual consent whenever a material change in License Conditions, Regulations or Otherwise etc., takes place. Such review shall only become effective after the express approval of the Authority has been obtained.

17. DISPUTES SETTLEMENT

It is understood and agreed that the **Parties** shall carry out this Agreement in the spirit of mutual co-operation and good faith and shall seek to resolve amicably any disputes arising between them.

The settlement of disputes shall take place in accordance with the Act. It is, however, desirable that before a matter is formally established as a dispute, reconciliation is attempted in the Coordination Committee referred to in section 15. The Committee shall resolve the matter within 30 days. The Authority may intervene at the request of either of the parties.

During any period of dispute, before or until resolution, a **Party** shall not disrupt services being provided to the other **Party**, or take any other actions, which might materially and adversely affect that **Party's** service

18. NOTICES

Unless otherwise provided in the Agreement, any notifications, service of process, petitions, claims and other Communications requested or permitted pursuant to this Agreement, shall be made in writing and shall be considered validly made when delivered by hand or by courier, telex or facsimile once receipt is verified at the following addresses.

If to **Party A:**

Attention:

With a copy to:

If to **Party B**:

Attention:

With a copy to:

or to such other address or persons as may have been designated in writing by the **Parties**.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year first above written.

[PARTY A]

[PARTY B]

By: _____

By: _____

Name:

Name:

Title:

Title:

Dated as of _____, 200__

INTERCONNECT OFFER CATALOGUE (IOC) SCHEDULES

SCHEDULE 1: POINT OF INTERCONNECT

Station	Type of traffic	POI	QoS

Note

1. Type of traffic means local, international, special services etc...
2. Outgoing, incoming and transit traffic should be shown separately
3. For each POI a physical description should be prepared, separate from the main interconnect agreement.

Each POI should be described in the following format:

Item	description	Remarks
Location of POI	Address:	
Party responsible for setting up and maintaining the POI	Name and address	
Physical description of POI	Physical cable Channel interface Etc..	

Note: Both parties shall update Schedule 1 at 6 months intervals or whenever new POIs are added.

Performance standards

	Type of network		
	Local	trunk	International
1. System availability a. Down Time b. MTTR			
2. Bit Error Rate			
3. Slip			
4. Others			

SCHEDULE 2: CHARGES FOR MISCELLANEOUS SERVICES

Type of facility	Charge	Details

SCHEDULE 3: CHARGES FOR SHARING OF INFRASTRUCTURE ELEMENTS

Type of facility	Charge	Details

--	--	--

SCHEDULE 4: TYPICAL SCHEDULE OF STANDARDS AND SPECIFICATIONS

S. No.	Item	Specification	Remarks
1	Switching Interface	ITU – T E series	
2	Transmission Interface	ITU – T G series	
3	Signalling system	SS7,	
4	Other cases		
5	Synchronisation		
6	Junction traffic		
7	Junction testing		
8	Higher layer protocols		
9	Interface with IP net	TCP/IP	
10	Electrical safety requirement	MS 95	
11	Quality of telecom services	ITU – T E series (E 800)	
12	Terms and definition	ITU – T B series (B13)	

SCHEDULE 5: INTERCONNECT USAGE CHARGES (IUC) FOR USE OF UNBUNDLED NETWORK ELEMENTS (UNE) INVOLVED IN CARRIAGE OF VARIOUS TYPES OF CALLS

No. Network Elements	Total OPEX per Direct Exchange Link (DEL)	Mean capital employed per DEL	Cost of capital (%)	Annual CAPEX	Annual CAPEX + OPEX per DEL	Minutes of Use (MOU)	Ave cost per minute
1. Access loop (wireline/wireless)							
2. Remote Subscriber Units (RSUs)							
3. Links to RSUs							
4. Local Exchanges (LEs)							
5. Links to LEs							
6. LE transmission link							
7. Tandem Exchange switch (TAX)							
8. Inter – TAX transmission link							
9. TAX to Intl gateway link (if applicable)							
10. Intl gateway element (if applicable)							
11. Others (specify)							

SCHEDULE 6: IUC DERIVED FROM SCHEDULE 5

Type of Access/carriage	Network elements involved	Charge/minute
Originating	Local loop-LE - TAX plus transmission link - Intl gateway (if applicable)	
Transit	Single TAX	
Transit*	Two TAX	
Transit*	Three TAX	
Terminating	Intl Gateway (if applicable) - TAX plus transmission link - LE-Local loop	

SCHEDULE 7: RATE OF INTEREST

Type of Interest	Rate	Remarks
Normal rate of interest		
Punitive rate of interest		