| PMCL – Reference Interconnect Offer    |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Pakistan Mobile Communications Limited |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Reference Interconnect Offer           |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# **CONTENTS**

| Mair       | n Body   | 5    |
|------------|--|------|
| Inter      | connection Agreement                               | 6    |
| REC        | ITALS:   | 6    |
| 1.         | Definitions, Interpretation and Structure          | 7    |
| 2.         | Scope of Agreement                                 | 8    |
| 3.         | Supply of Service                                  | 8    |
| 4.         | Commencement and Duration                          | 9    |
| 5.         | Charges  | 9    |
| 6          | Payment  | 9    |
| 7.         | Interconnection and Standards                      | . 10 |
| 8.         | Network Alterations and Data Management Amendments | . 11 |
| 9          | Network Protection and Safety                      | . 13 |
| 10.        | Quality of Service                                 | . 12 |
| 11.        | Fault Management and Planned Maintenance           | . 13 |
| 12.        | Co-Location  | . 13 |
| 13.        | Numbering  | . 14 |
| 14.        | Calling Line Identification ("CLI")                | . 15 |
| 15.        | Suspension   | . 15 |
| 16.        | Termination  | . 17 |
| 17.        | Review and Amendments                              | . 19 |
| 18.        | Customer Relationship                              | . 20 |
| 19.        | Parties Representations and Communications         | . 20 |
| 20.        | Credit Management and Security Deposit             | . 21 |
| 21.        | Dispute Resolution                                 | . 24 |
| 22         | Reference to Authority for Dispute Resolution      | . 25 |
| 23.        | Arbitration  | . 25 |
| 24.        | Limitation of Liability                            | . 26 |
| 25.        | Indemnification                                    | . 27 |
| 26.        | Intellectual Property Rights                       | . 27 |
| 27.        | Provision of Information                           | . 28 |
| 28.        | Confidentiality                                    | . 29 |
| 29.        | Entire Agreement                                   | . 30 |
| 30.        | Severability                                       | . 30 |
| 31.        | Assignment   | . 30 |
| 32.<br>33. | Notices and Invoices                               |      |
| 34.        | Force Majeure                                      | . 31 |
| 35.        | Waiver   | . 33 |
| 36.        | Good Faith and Non-Exclusivity                     | . 33 |

| 37.  | Independent Contractors and Agency                           | 33         |
|------|--|------------|
| 38.  | Non Discrimination   | 34         |
| 39.  | Representations and Warranties                               | 34         |
| Anne | ex A – Interconnection Agreement Signing Procedure           | 35         |
| Anne | ex B – Services  | 49         |
| Sche | dule B1- Call Termination Services                           | 50         |
| 1.   | General Terms  |            |
| 2.   | Information Collection for Call Termination Services         | . 50       |
| 3.   | Charging Principles  | 50         |
| 4.   | List of Call Types for Call Termination Services by PMCL     | . 52       |
| 5.   | List of Call Types for Call Termination Services by Operator | . 52       |
| 6.   | Call Routing Principles                                      | . 52       |
| Sche | dule B2 - Conveyance of Short Messages                       |            |
| 1    | General  |            |
| 2.   | Charging Principles  |            |
| 3.   | Routing Principles   |            |
| 4.   | SMSC Number Information                                      |            |
| 5.   | Customer Relationship  | . 54       |
| Sche | dule B3 – Physical Interconnection and Co-Location Services  | 55         |
| 1.   | General  |            |
| 2.   | Charging Principles  |            |
|      |  |            |
|      | dule B4 - Conveyance of Multimedia Messages                  |            |
| 1.   | General  |            |
| 2.   | Charging Principles  |            |
| 3.   | Routing Principles   |            |
| 4.   | MMSC Number Information                                      |            |
| 5.   | Customer Relationship  | . 57       |
| Anne | ex C - Technical   | 58         |
| 1.   | General  | . 59       |
| Saha | dule C1- Physical Interconnection                            | <b>5</b> 0 |
| 1.   | General  |            |
|      |  |            |
| Sche | dule C2 – SMS Interconnection                                |            |
| 1.   | General  | 62         |
| Sche | dule C3- Interconnect Ordering                               | 63         |
| 1.   | Forecasting  |            |
| 2.   | Ordering   |            |
| 3.   | Delivery and Utilization                                     |            |
|      | •  |            |
|      | dule C4-Testing  |            |
| 1.   | General  |            |
| 2.   | Interconnection Link Testing                                 |            |
| 3.   | Billing Testing  |            |
|      | dule C 5 – Calling Line Identification (CLI)                 |            |
| Sche | dule C6 - Standards, Interfaces and Protocols                |            |
| 1.   | General  |            |
| 2.   | Microwave  | . 70       |
| 3.   | Optical Fibre  |            |
| 4.   | 708 Synchronization  | 71         |
| 5    | Signalling requirements and standards                        |            |
| 6.   | Numbering  |            |
| 7.   | Environmental requirements for Co-Location Equipment         |            |
| 8.   | Power Requirements   |            |
| 9.   | Miscellaneous  |            |
| _    |  |            |
| Sche | dule C7 – Maintenance and Fault Management                   | . 74       |

# PMCL – Reference Interconnect Offer

| 1.   | Fault Reporting   | 74  |
|------|---|-----|
| 2.   | Fault Handling  | 74  |
| 3.   | Planned Engineering Works   | 75  |
| Sche | dule C8 – Co-location Site Ordering, Maintenance and Access Procedure | 75  |
| 1.   | Ordering and Provisioning Procedure                                   | 75  |
| 2.   | Co-Location Equipment Installation and Maintenance Procedures         | 76  |
| 3.   | Termination of Co-Location Space                                      |     |
| 4.   | Access Procedures   |     |
| Sche | dule C9 – MMS Interconnection   | 83  |
| Anne | ex D - Charges  | 99  |
| 1.   | General   |     |
| 2.   | Charges for Call Termination  | 100 |
| 3.   | Charges for Short and Multimedia Message Termination Services         |     |
| 4.   | Co-Location and Capacity Charges                                      |     |
| 5.   | Testing Charges   |     |
| 6.   | Review of Charges   |     |
| 7    | Applicable Taxes  |     |
| 8.   | Late payment Charges  |     |
| Anne | ex E – Billing  | 103 |
| 1.   | General   |     |
| 2.   | Billing and Settlement  |     |
| 3.   | Billing Disputes  |     |
|      |   |     |
| Anne | ex F – Glossary   |     |
| 1.   | Interpretation  | 113 |
| 2    | Definitions   | 114 |

# Main Body of the Interconnection Agreement

#### **Interconnection Agreement**

This **Interconnection Agreement** ("Agreement") is made on [], ("Effective Date"), by and between:

**Pakistan Mobile Communications Limited**, a company incorporated under the Companies Ordinance 1984 having its office at 1-A, IBCDHQ, F-8 Markaz, Islamabad, Pakistan (hereinafter referred to as "**PMCL**") of the one part;

| and                          |                                 |                                    |
|------------------------------|---------------------------------|------------------------------------|
|                              | , a company incorporated u      | under the Companies Ordinance      |
| 1984 having its registered   | office at                       | (hereinafter referred to as        |
| "Operator") of the other par | t.                              |                                    |
|                              |                                 |                                    |
| (PMCL and Operator are h     | ereinafter collectively referre | d to as "Parties" and individually |

#### **RECITALS:**

as "Party").

- 1. PMCL is licensed to operate provide cellular mobile telephone services in Pakistan and AJK&NAs under the licenses No. (30)/89-PTC issued by Pakistan Telecommunications Authority the Government of Pakistan on 6 July, 1992 which was revalidated by the Authority vide its Revalidation order number Nil dated 9 August, 1997 (the "PMCL License", which term shall include any extension or renewal of the PMCL License by the Authority), and operates and maintains its telecommunication network ("PMCL Network"). PMCL Licenses are:
  - i) MCT- 02/RBS/PTA/2004 dated May 26, 2004;
  - ii) MCT-01/WLL&M/PTA/2006 dated June 26, 2006;
  - iii) MCT-01/WLL&M/PTA/2006 dated June 26, 2006
  - iv) MCT- 05/WLL&M/PTA/2007 dated July 6, 2007; and
  - v) NGMS-04/WLL&M/PTA/2014 dated May 21, 2014;
  - <u>i)vi) NGMS-06/WLL&M/PTA/2017</u> dated June 29, 2017.
- 4.2. The Operator has been granted a license as a LL Operator ("LDI") and/or LDI Operator ("LDI") and/or Cellular Mobile Operator ("CMO") by the Authority to provide telecommunication services to the public in Pakistan.

- 2. 3.-Pursuant to clause 7.1.2.13 of PTA's decision dated 19 May 2016 in the merger between PMCL and Warid, PMCL merged entity is required, pursuant to submit Rule 13 of the Pakistan Telecommunication Rules, 2000, to enter into an its Reference Interconnection Offer ("RIO") interconnect to PTA.-ion agreement within ninety (90) days from of the request of from another operator. In order to facilitate the efficient conclusion of such an interconnection agreement on fair and reasonable terms and pursuant to its obligations as a significant market power operator, PMCL has prepared and the Authority has approved this Reference Interconnection Offer ("RIO"). In order to facilitate the efficient conclusion of such an interconnection agreement on fair and reasonable terms, PMCL has prepared and the Authority has approved this RIO.
- 4. \_This RIO sets out the terms and conditions upon which PMCL shall supply the Interconnection related services described in Clause 2 and the Annexes hereof (the "PMCL Services") to the Operator, and the terms and conditions for the supply of certain Interconnection related services described in Clause 2 and the Annexes by the Operator to PMCL (the "Operator Services").
- 5. The Parties agree to interconnect the PMCL Network to the Operator's telecommunication network (the "Operator Network") in accordance with this Interconnection Agreement.
- 6. The Parties acknowledge that a Third Party may not rely on this Interconnection Agreement to obtain similar benefits from either Party.

**NOW, THEREFORE**, in consideration of the premises and mutual covenants and agreements herein set forth, the Parties agree as follows:

# 1. Definitions, Interpretation and Structure

- 1.1 In this Interconnection Agreement, except if the context specifies otherwise, words and expressions have the meanings as set out in **Annex F**, and this Interconnection Agreement is to be construed in accordance with that Annex.
- 1.2 The following documents shall be deemed to be read and construed as part of the Interconnection Agreement:

The main body of this Interconnection Agreement; Annex

A - Interconnection Agreement Signing Procedure; Annex

B - Services;

Annex C - Technical;

Annex D - Charges;

Annex E - Billing;

Annex F - Glossary.

- 1.3 In the event of any inconsistency between the main body of the Interconnection Agreement, the Annexes, the Schedules, and Attachments, the order of precedence (unless expressly stipulated to the contrary) shall be as follows:
  - (a) the main body of the Interconnection Agreement; Annex D;
  - (b) the other Annexes;
  - (c) the Schedules;
  - (d) the Attachments.

#### 2. Scope of Agreement

- 2.1 Subject to **Clause 2.3**, the PMCL Services covered by this Interconnection Agreement are set out in **Annex B** and the terms and conditions of supply are set out in this main body of the Interconnection Agreement and the relevant Annexes.
- 2.2 Subject to Clause 2.3, the Operator Services covered by this Interconnection Agreement are set out in Annex B and/or Attachment A3, as applicable, and the terms and conditions of supply are set out in this main body of the Interconnection Agreement and the relevant Annexes.
- 2.3 For the avoidance of doubt, and notwithstanding the Interconnection, neither Party shall hand over to the other Party, nor have an obligation to convey Calls or Short Messages of any category, unless the other Party has agreed to convey Calls or Short Messages of that category.

#### 3. Supply of Service

- 3.1 PMCL agrees to supply the Operator on the prices, terms and conditions set out in this Interconnection Agreement those PMCL Services listed in **Annex B** to the extent set out in agreed **Attachment A2**.
- 3.2 If applicable, the Operator agrees to supply the Operator Services to PMCL on the prices, terms and conditions set out in this Interconnection Agreement and at PMCL request as set out in agreed **Attachment A3**.
- 3.3 The Parties may from time to time amend this Interconnection Agreement, subject to approval of the Authority, to include the addition of New Services not previously available under this RIO.
- 3.4 PMCL may amend (including provision of New Services) or withdraw its RIO from time to time with the consent of the Authority.
- 3.5 Any amendments made to the PMCL RIO by the Authority will automatically form part of this Interconnection Agreement.

#### 4. Commencement and Duration

- 4.1 This Interconnection Agreement shall be submitted to the Authority by PMCL within seven (7) days after both Parties have executed it.
- 4.2 This Interconnection Agreement shall commence on the Effective Date and, without prejudice to **Clause 34** (Force Majeure), shall continue in full force from the Effective Date until the earlier of:
  - (a) the expiry or termination of either Party's License; or
  - (b) the termination of this Interconnection Agreement by a Party in accordance with Clause 15 or 16 hereof or other right at law.

# 5. Charges

- 5.1 Subject to Clause 20 the Operator shall pay to PMCL Charges for the PMCL Services supplied by PMCL to the Operator within the timeframe specified, calculated in accordance with and/or as specified and amended from time to time in Annex B, Annex D and Annex E. For the avoidance of doubt Charges shall be payable by the Operator to PMCL for any Calls or Short Messages (if charging for Short Messages is applicable in relation to the Operator) terminating on the PMCL Network which are handed over from the Points of Interconnection irrespective of the numbering series exchanged in terms of this Interconnection Agreement.
- 5.2 PMCL shall pay to the Operator Charges for the Operator Services supplied by the Operator to PMCL within the timeframe specified, calculated in accordance with and/or specified (as amended from time to time), in **Annex B**, **Annex D**, **Attachment A3** and **Annex E**.
- 5.3 Subject to **Clause 38**, the Parties may mutually review and amend the Charges set out in this Interconnect Agreement, subject to prior approval of the Authority. The charges shall also be amended by the Parties on the directions of the Authority.
- 5.4 No Charges shall be payable under this Interconnection Agreement by one Party to the other unless such Charges are specifically referred to in this Interconnection Agreement.

# 6 Payment

- 6.1 Each Party shall provide the other invoices of all amounts due to it, calculated in accordance with the provisions of **Annex B**, **Annex D**, **Attachment A3 and Annex E**, as appropriate, and any amendments in accordance with **Clause 5.3**.
- 6.2 All Charges in this Interconnection Agreement are exclusive of GST, central excise duty, or any other tax applicable to the provision of the Services unless the contrary is expressly stated. All taxes including GST, central excise duty or any other taxes shall be payable by the Party, where applicable, acquiring such Services.

- 6.3 The Parties shall bear and pay all taxes as required by the laws of Pakistan that result from the implementation of this Interconnection Agreement or the acquisition of the Services under this Interconnection Agreement. If either Party is required under the laws of Pakistan to deduct or withhold any sum as taxes imposed on or in respect of any amount due or payable to the other Party, then such former Party shall make such deduction or withholding as required and shall furnish to the other Party the evidence of the sum deducted or withheld and deposited with the tax authorities.
- 6.4 Invoices are due and payable in Pakistan.
- 6.5 All payments must be:
  - (a) paid by banker's draft, cashier's order or electronic transfer and the same shall be credited on or before the due date directly to the account(s) of the Party to receive the payment;
  - (b) subject to **Annex E**, paid without counterclaim; and
  - (c) accompanied by such information as is reasonably required by the Party receiving the payment to properly allocate payments received.
- 6.6 Subject to **Clause20**, the Parties shall comply with **Annex E** in respect of all aspects of billing, settlement and dispute of payments under this Interconnection Agreement.

#### 7. Interconnection and Standards

- 7.1 The Parties shall connect and keep connected the PMCL Network and the Operator Network at Points of Interconnection in accordance with this Interconnection Agreement (to the extent permitted by the PMCL License and the Operator License).
- 7.2 The Parties shall comply with the provisions as well as the technical specifications ("Specifications") set forth in **Annex C** in so far as they apply to the provision of Services pursuant to this Interconnection Agreement.
- 7.3 In the practical implementation of procedures, standards and technical specifications relating to Interconnection, the Parties shall have due regard to the following (in the order of precedence specified below):
  - (a) any legal requirements imposed on each of them including requirements arising from the PMCL License and the equivalent conditions of the Operator License; and
  - (b) any relevant specifications notified by the Authority in accordance with law; and
  - (c) any recommendations by the ITU-T or other internationally recognized standard setting bodies adopted by PMCL; and
  - (d) the GSM memorandum of understanding (where applicable).

7.4. The Interconnection Link established under this Interconnection Agreement shall be used for bi-directional traffic unless otherwise agreed by the Parties.

#### 8. Network Alterations and Data Management Amendments

- A Party wishing to make a modification to its Network that shall have a material impact on the Services or on the other Party's Network (a "Network Alteration") shall give to the other Party a Network Alteration Notice. The notice period in a Network Alteration Notice shall not apply to such Network Alterations that are validly required to be implemented by the Authority within a shorter time frame. The Network Alteration Notice shall specify the technical details of the Network Alteration and the date of the anticipated Network Alteration. Following such notification each Party shall supply to the other such information as the other Party may reasonably request including in the case of the Party giving the Network Alteration Alternation—Notice, to the extent reasonably practicable, the potential impact on the other Party's Network.
- 8.2 Each Party shall bear its own costs arising out of the Network Alteration.
- 8.3 If a Party makes a Network Alteration, it shall ensure that Calls and Short Messages handed over from the other Party are not prevented to any greater extent or hindered in any manner different from the generality of Calls made or Short Messages sent by the altering Party's Customers.
- 8.4 The Parties agree to fully co-operate and consult with each other on the implementation of Network Alterations and to keep each other informed of the steps involved, with a view to minimizing and, if possible, eliminating any disruption to the Services supplied under this Interconnection Agreement. The Parties agree to fully co-operate and consult with each other with a view to accommodating both Parties' reasonable expectations regarding the time commitments and implications of the proposed Network Alteration.
- 8.5 Subject to Clause 9.1 and 9.3 of this Agreement, each Party has the right to modify, change or substitute underlying technology or the specifications of the Services to improve the functioning or performance of the Services or their respective Networks provided that such modifications do not materially adversely alter the functioning or performance of the Services supplied to the other Party.
- 8.6 Nothing in this Interconnection Agreement may be construed to preclude a Party from using, modifying or substituting such of its equipment for other equipment as reasonably required to provide any of the Services within the scope of this Interconnection Agreement.
- 8.7 Subject to **Clause 8** the Parties may from time to time agree to add or reduce Interconnection Sites. Such changes in Interconnection shall be in accordance with the provisions of **Annex C**.

- 8.8 Each Party shall endeavour to minimise the number of Data Management Amendments in the other's Network to those required to ensure efficient call routing and provision of agreed Billing Information.
- 8.9 With respect to Data Management Amendments relating to digit analysis ("**Digit Level Data Management Amendments**") written notice shall be provided by the Party requesting the Data Management Amendment at least ninety Calendar Days prior to the requested implementation date.
- 8.10 Data Management Amendments relating to numbering range changes ("Number Range Data Management Amendments") shall be implemented by the Party from whom such Number Range Data Management is requested no later than the end of the first Calendar Month of the Calendar Quarter immediately succeeding that in which the notice for Number Range Data Management Amendment was received by the Party.
- 8.11 Each Party shall bear its own cost of carrying out Data Management Amendments in its Network.
- 9 Network Protection and Safety
- 9.1 Each Party is responsible for the safe operation of its Network, and shall, so far as is reasonably practicable, take all necessary steps to ensure that its Network, its Network operations and implementation of this Interconnection Agreement:
  - (a) do not endanger the safety or health of any person, including the employees and contractors of the other Party; and
  - (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 operation of the Services of such Party's Network.
- 9.2 The Parties shall manage their Networks to minimise disruption to the Services and, in the event of interruption or failure of any one of the Services, shall restore those Services as soon as is reasonably practicable. Each Party shall notify the other Party of any faults (pursuant to fault notification procedures set forth in **Schedule C7**) and shall manage and correct faults arising in its Network that affect the provision of any one of the Services by the other Party as it would in the ordinary course for similar faults affecting the provision of the Services by it.
- 9.3 Neither Party shall use or permit the use of any Service, or install, connect, link or use (or permit the installation, connection, linking or use of) any telecommunications equipment in contravention of any law. If either Party considers that the other Party is acting, or is likely to act, in contravention of this **Clause 9**, then the first-mentioned Party may seek the Authority's approval to take necessary corrective action, unless an imminent threat to life or property arises (or is likely to arise) in which case the first-mentioned Party may take immediate necessary corrective action. On receipt of the Authority's approval (or as

otherwise stated in this **Clause 9.3**), the first-mentioned Party may take the necessary corrective action.

9.4 Each Party shall ensure that its Network and operating procedures comply in all respects with this Interconnection Agreement.

#### 10. Quality of Service

#### 10.1. Each Party shall:

- (a) ensure that the Services it provides to the other Party are of the quality comparable to what it provides to itself and its affiliates; and
- (b) maintain and repair faults on Interconnect Links in the same manner as it maintains similar plant and repairs similar faults within its own Network.
- 10.2. Neither Party warrants that its Network is or shall be free from faults. The Parties shall comply with the fault identification and reporting guidelines set out in this Agreement.
- 10.3. In performing their obligations under this Agreement, the Parties shall exercise the reasonable skill and care of a competent telecommunications operator.
- 10.4. The Parties shall use reasonable endeavours to meet the performance standards set out in their respective Licenses.

#### 11. Fault Management and Planned Maintenance

11.1 The Parties agree to comply with the provisions of **Schedule C7** with respect to fault handling and planned maintenance of the Networks.

#### 12. Co-Location

- 12.1 Subject to **Clause 12.7** and availability of space, PMCL shall make available Co-Location to the Operator. Such Co-Location shall be in accordance with the terms and conditions set out in **Schedule B3** and **Annex C**.
- 12.2 The Operator shall make payment to PMCL for use of the Co-Location Site(s), the Capacity acquired (on per E1 basis) and/or any other facilities of PMCL so acquired for the purpose of Interconnection in accordance with terms of **Annex D**.
- 12.3 Neither Party shall connect or knowingly permit the connection to its Network of any Interconnect Equipment, unless the Authority has approved such equipment.
- 12.4 Where PMCL does not have sufficient space to accommodate the Operator's Co-location Request at the requested Co-Location Site, PMCL shall, where possible, suggest an alternative Co-Location Site.

- 12.5 If an alternative Co-Location Site is either not available or not suitable for the Operator, for operational reasons, the Operator shall make suitable agreement with a Third Party for space for placement of Operator's Interconnect Equipment at locations of such Third Party where PMCL has infrastructure for the purposes of Interconnection ("Third Party Interconnection Site(s)"). The Operator shall obtain all the necessary approvals for such Co-Location and shall make payment of charges and bear the cost of installation for Co-location at such Third Party Co-Location Sites.
- 12.6 Each Party shall take all necessary measures to ensure the safety of the other Party's equipment at its premises. Notwithstanding the foregoing, it is the responsibility of each Party to provide adequate insurance cover for its respective equipment. In no case shall either Party be responsible for any damage to the other Party's Co-Location Equipment caused by fire, water leakage, air-conditioning/mechanical ventilation failure, power fluctuation/interruption, or anything beyond that Party's control (Force Majeure) at the Co-Location Site other than to the extent that it is the result of a grossly negligent, willful or reckless breach of this Agreement.
- 12.7 PMCL shall give regard to the following when assessing the availability of Co-location Space at a Co-Location Site:
- (a) PMCL's reasonably anticipated requirements in the next four (4) years for space at the Co-Location Site for the provision to itself and its Customers;
- (b) PMCL's reasonably anticipated requirements in the next four (4) years for space at the Co-Location Site for operation and maintenance purposes;
- (c) the Operator and other Third Party requirements (including for operation and maintenance purposes) that have been ordered but not yet delivered or that have been provided;
- (d) security and confidentiality requirements imposed on PMCL by Governmental Agencies;
- (e) whether PMCL proposes to de-commission the Co-Location Site.

#### 13. Numbering

- 13.1 Each Party shall use numbers in accordance with the Numbering Plan issued by the Authority.
- 13.2 Subject to **Clause 8**, the Parties shall ensure that sufficient and correct numbering information is sent from one Network to the other for the correct delivery of Interconnected Calls or Short Messages and for implementation of the Numbering Plan.
- 13.3 The Parties shall convey to each other telephone numbers in the national and international formats as contained in the Numbering Plan issued by the Authority.

13.4 The Parties shall adopt and comply with the numbering system and number format as specified in the Numbering Plan and framework and guidelines on the usage set out therein.

#### 14. Calling Line Identification ("CLI")

14.1. The Parties agree to comply with the provisions of Schedule C5 with respect to CLI.

#### 15. Suspension

- 15.1 Subject to **Clause 15.2** either Party (the "**Suspending Party**") may suspend the provision of its Services (and at its discretion acquisition of the other Party's Services) under this Interconnection Agreement by providing notice to the other Party if:
  - (a) the other Party's Network has a material adverse effect on the normal operation of the Suspending Party's Network, or
  - (b) the other Party's Network or the supply of a Service pertaining to this Agreement to the other Party poses an imminent threat to the Network of the Suspending Party; or
  - the other Party's Network causes or is likely to cause physical or technical harm to any telecommunications network, system or services (whether of the Suspending Party or any other person) including but not limited to causing damage, interfering with or causing deterioration in the operation of the Suspending Party's Network; or
  - (d) the other Party is in material breach of this Interconnection Agreement including, but not limited to, failure to pay any sum under this Agreement or failure to deposit the disputed amount in the Escrow Account in terms of

#### Annex E; or

- (e) the Operator fails to provide Security Deposit or make payment of any amount in accordance with the conditions set out in **Clause 20**; or
- (f) if, in the Suspending Party's reasonable opinion, the other Party attempted to use, is likely to use, or has used any Services supplied under this Agreement (whether with or without the authorization and/or permission of the Suspending Party) in contravention of law and the Suspending Party has the necessary confirmation from the relevant Governmental Agency that the other Party is in contravention of law; or
- (g) compliance with legal or regulatory obligations requires immediate action; or
- (h) continued operation of this Interconnection Agreement would be unlawful or would pose a serious threat to health or an imminent threat to life or property; or
- (i) any material information provided or representation made by the other Party to the Suspending Party is untrue, false, misleading or inaccurate and has an adverse material

impact on the Suspending Party in relation to its provision of Services under this Interconnection Agreement

- 15.2 Except for the cases mentioned in **Clause 15.3**, the Suspending Party shall request the Authority's written approval before such suspension and suspension rights shall not be exercised without the Authority's written approval unless serious threat to health, imminent threats to life or property or compliance with other legal or regulatory obligations require immediate action, in which case the Suspending Party may immediately suspend the operation of this Interconnection Agreement, and shall forthwith notify the Authority of such suspension seeking ex post approval of such suspension. In the event such suspension is ordered to be lifted by the Authority on the determination that the suspension was unwarranted in terms above or it is otherwise determined that the suspension was unwarranted, the Suspending Party shall be liable for compensation to the other Party as determined by the Authority.
- 15.3 The Suspending Party may immediately suspend the provision of Services to other Party for failure:
  - (j) to pay Charges in terms of Annex E; or
  - (ii) to deposit the disputed amount in the Escrow Account in terms of Annex E; or
  - (iii) to provide / amend / replenish Security Deposit in terms of Clause 20.

Provided that failure for (i) and (iii) above is not subject to Dispute and the Suspending Party has given seven (07) Calendar Days written notice of such failure to the other Party and the other Party has not rectified such failure within that time.

- 15.4 If the Authority issues an order granting in whole or in part the request under **Clause 15.2**, the Suspending Party may immediately suspend (for such period of time as the Authority approves, or indefinitely if the Authority does not specify a period of time) this Interconnection Agreement, or Schedule, or permission, or those parts of this Interconnection Agreement or Schedule or permission covered by the Authority's order by giving written notice to the other Party.
- 15.5 A Party shall not be required to pay Charges for any Service as long as it remains suspended, unless directed otherwise by the Authority. Any charges for reconnection or reinstatement of the Service after lifting of suspension shall be payable (i) if the suspension was validly made or made pursuant to an order of the Authority, by the Party whose Services were suspended, and (ii) in any other case, by the Suspending Party.
- 15.6 If Services are suspended under this **Clause 15** for more than sixty (60) Calendar Days, the Suspending Party may, subject to **Clause 16.2**, terminate this Agreement with immediate effect by giving the other Party written notice.

#### 16. Termination

- 16.1. Subject to **Clause 16.2**, either Party (the "**Terminating Party**") may terminate the Interconnection Agreement by providing notice to the other Party if:
  - (a) the other Party ceases to be an LL / LDI / CMO licensee; or
  - (b) a permission in respect of Co-location Space under Schedule B3 and Schedule C8 terminates unless the other Party has put in place alternative arrangements for Interconnection to occur prior to the termination of the license of Co-location Space; or
  - (c) the other Party is in material breach of this Agreement including, but not limited to, failure to pay any sum under this Agreement or failure to deposit the disputed amount in the Escrow Account in terms of **Annex E**; or
  - (d) the Operator fails to provide or amend Security Deposit or make payment of any amount in accordance with the conditions set out in Clause 20; or
  - (e) the other Party is unable to pay its debts, becomes insolvent, or has ceased or threatens to cease business, or an order for winding up has been passed by a Court of competent jurisdiction, or a resolution for voluntary winding up has been passed, or a receiver or manager or judicial manager has been appointed over the whole or substantial part of its assets or property, or the other Party ceases to carry on business, or any action is taken by any creditor of the other Party to recover, realise or enforce any security or to enforce any judgment against the whole or a substantial part of the assets or property of the other Party; or
  - (f) continued operation of this Interconnection Agreement is unlawful or poses a serious and imminent threat to health, life or property; or
  - (g) if, in the Terminating Party's reasonable opinion, the other Party attempted to use, is likely to use, or has used any Services (whether with or without the authorization and/or permission of the Terminating Party) in contravention of any law and the Terminating Party has the necessary confirmation from the relevant Governmental Agency that the other Party is in contravention of law; or
  - (h) any material information provided or representation made by the other Party is untrue, misleading or inaccurate and has an adverse material impact on the Terminating Party in relation to its provision of Services under this Agreement.
- 16.2. Prior to terminating this Interconnection Agreement, the Terminating Party shall notify the Authority that it proposes to terminate the Interconnection Agreement, and request the Authority's written approval of such termination. Termination rights shall not be exercised without the Authority's written approval.
- 16.3. If the Authority issues an order granting in whole or in part the request under **Clause 16.2**, the Terminating Party may immediately terminate this Interconnection Agreement, the Annexe(s), Schedule(s) or permission covered by the Authority's order by giving written

- notice to the other Party provided such notice complies with the conditions, if any, of the order of the Authority in relation to the termination of this Agreement.
- 16.4. If the Authority removes a Service supplied under this Interconnection Agreement from being required to be supplied under this RIO or exempts a Party from supplying a Service, that Party may immediately terminate the supply of such Service and those terms and conditions which relate to such Service, by giving written notice to the Other Party with effect from or after the effective date of such removal or exemption as notified by the Authority
- 16.5. In the event that this Interconnection Agreement is terminated:
  - (a) all Services, permissions and other rights conferred on PMCL or the Operator under this Agreement (as the case may be) shall immediately terminate;
  - (b) all sums due or accrued or payable to each Party under this Agreement up to the date of termination and all sums due or payable to each Party shall upon termination become immediately due and payable to that Party (including any termination Charges due under the applicable Annexes or Schedules);
  - (c) each Party shall immediately return to the other Party at its own expense all equipment, facilities, plant and other property of the other Party used under this Interconnection Agreement in good working condition, fair wear and tear only excepted;
  - (d) each Party shall immediately remove all of that Party's equipment, facilities, plant and other property located on the other Party's premises used under this Agreement; and
  - (e) each Party must, at its own expense, deliver to the other Party, or after notices from that other Party, return, destroy or erase all documents or other forms of storage which comprise or contain the other Party's Confidential Information or from which the other Party's Confidential Information can be reproduced.
- 16.6. A Party shall be entitled to charge the other Party the cost incurred in repossessing or acquiring a replacement of any equipment, facilities, plant and other property that the other Party has failed to return under Clause 16.5, within thirty (30) Calendar Days of the date of termination and/or of acquiring a replacement of any equipment which is returned in a damaged or defective condition.
- 16.7. A Party may remove the other Party's equipment, facilities, plant and other property located on its premises if not removed by the other Party within thirty (30) Calendar Days after the date of termination.
- 16.8. Each Party shall take such steps and provide such facilities as are necessary for recovery by the other Party of equipment (if any) supplied by that other Party as soon as reasonably practicable. Each Party shall use reasonable endeavours to recover equipment made available by it.

- 16.9. Notwithstanding the termination or expiry of this Agreement, Clauses 12.3, 24, 25,27 and 28 shall continue in full force and effect
- 16.10. Each of the Parties' right to terminate or suspend performance of this Interconnection Agreement pursuant to this **Clause 16** is without prejudice to any other rights or remedies available to either Party.

#### 17. Review and Amendments

- 17.1. This Agreement shall be amended and/or restated by the Parties, as and when required by the Authority in accordance with law.
- 17.2. Subject to **Clause 17.1**, any amendment to this Agreement shall only be valid if any such amendment is made in writing and agreed by the Parties.
- 17.3. A Party may seek to amend this Agreement by serving on the other Party a review notice if:
  - (a) Either Party's License is materially modified (whether by amendment or replacement); or
  - (b) a material change occurs in the law or regulations; or (c) this Interconnection Agreement makes express provision for a review or the Parties agree in writing that there should be a review; or
  - (d) a material change (including enforcement action by any regulatory authority) occurs that affects or reasonably could be expected to affect the commercial or technical basis of this Interconnection Agreement; or
  - (e) this Interconnection Agreement is assigned or transferred by the other Party except if prior written consent to the assignment or transfer is not required under Clause 31 Assignment; or
  - (f) there is a general review pursuant to Clause 17.5.
- 17.4 A Party shall serve a review notice not later than the expiration of a 6 months period commencing on the date set opposite each clause as follows:

| Clause   | Clause Period commencing on the date:                         |  |
|----------|---|--|
| 17.3 (a) | of publication of the modifications to the License            |  |
| 17.3 (b) | of occurrence of material change                              |  |
| 17.3 (c) | of entitlement or occurrence of the date of written agreement |  |
| 17.3 (d) | of occurrence of the material change                          |  |
| 17.3 (e) | of notification of assignment or transfer                     |  |

- 17.5. A Party may initiate a general review of this Interconnection Agreement by serving a review notice during the period of six (6) months commencing on the Effective Date and once every one (1) year thereafter.
- 17.6. On service of a review notice, the Parties shall forthwith negotiate in good faith the matters to be resolved with a view to agreeing the relevant amendments to this Interconnection Agreement.
- 17.7. For the avoidance of doubt, the Parties agree that notwithstanding service of a review notice this Interconnection Agreement shall remain in full force and effect.
- 17.8. If the Parties fail to reach agreement on the subject matter of a review notice pursuant to Clause 17 within 3 months from the date of service of such review notice, either Party may request the Authority in writing to determine in accordance with Clause 22 the matters upon which the Parties have failed to agree.
- 17.9. The Parties shall enter into an agreement to modify or replace the Interconnection Agreement in accordance with any order, direction, determination or consent of the Authority, unless such order, direction, determination or consent is subject to a legal challenge.
- 17.10. If the order, direction, determination or consent is subject to a legal challenge, then the Parties shall modify or replace the Interconnection Agreement at the conclusion of the legal proceedings in accordance with the Authority's order, direction, determination or consent as a result of the legal proceedings.
- 17.11. The provisions of these clauses are intended to establish a framework for the review and amendment of the provisions of this Interconnection Agreement, but are not intended to prejudice the rights, liabilities and obligations of the Parties created by and under their Licenses.
- 17.12. This **Clause 17** shall not prejudice any rights of a Party in terms hereof to amend this Interconnection Agreement in terms of the Annexes, and shall not extend to amendments in terms of such Annexes.

# 18. Customer Relationship

18.1 The Parties acknowledge and agree that notwithstanding any failure by one or more of their Customers to pay in respect of a Service, the Party having such Customer shall be liable to pay to the other Party in respect of the relevant Charges for the Services supplied by the other Party under this Interconnection Agreement.

#### 19 Parties Representations and Communications

19.1 Where a Party communicates with a Customer of either Party, such communications must not falsely attribute to the other Party:

- (a) blame for a fault or circumstance; or
- (b) the need for network maintenance or upgrade; or
- (c) the interruption or suspension of a service; provided that this requirement does not permit the first-mentioned Party to engage in

provided that this requirement does not permit the first-mentioned Party to engage in unethical, misleading or deceptive conduct.

- 19.2 Neither Party, its representatives and agents, may represent expressly, impliedly, or by omission or implication that:
  - (a) it is approved by, an agent of, or affiliated with the other Party; or
  - (b) in the case of the Operator, that it is PMCL, for example, by claiming it is "from PMCL" or, in the case of PMCL, that it is the Operator; or
  - (c) it has a special relationship with the other Party or special pricing from the other Party; or
  - (d) the services provided by it to Customers are the other Party's services.

#### 20. Credit Management and Security Deposit

- 20.1 The Operator shall provide, at its sole cost and expense, to PMCL, and maintain for the term of this Interconnection Agreement, a Security Deposit in the form of Bank Guarantee as set out in **Attachment A8** and/or Pre-Payment amount, being valid for a period in accordance with the terms set out in **Clause 20.3** and **Clause 20.4** hereunder.
- The amount of Bank Guarantee shall not be less than the amount determined in accordance with Clause 20.3 and Clause 20.4 below ("Credit Value") as amended in accordance with Clause 20.5. PMCL shall be entitled to a valid and subsisting Bank Guarantee for so long as any Service (notwithstanding that it has been suspended) continues to be provided and for a period of sixty (60) Calendar Days thereafter. PMCL shall be entitled to make demand for the entire amount payable under Bank Guarantee if, in the event such Bank Guarantee is expiring, a replacement Bank Guarantee has not been provided to ensure coverage in terms hereof, not later than seven (7) Calendar Days prior to such expiry.
- 20.3 Credit Value for the first six (6) months from commencement of PMCL Services shall be determined on the basis of following formula and the related Bank Guarantee shall be valid for a period of at least six (6) months:

 $CV = E1 \times M \times R \times P$ 

Where:

CV = Credit Value

E1 = Total Number of Ordered E1s

M = 430,000 Minutes per E1

R = PMCL Call Termination Charges as per **Annex D** 

P = 2.75 Months

20.4 Credit Value for the period after first six (6) months shall be determined within fifteen (15)

Calendar Days prior to the expiration of the first six (6) months and thereafter within fifteen

(15) Calendar Days prior to the expiry of the subsisting bank guarantee on the

RPMCL basis of following formula and the related Bank Guarantee shall be valid for a period of at least twelve (12) months, subject to minimum of Credit Value determined under Clause 20.3:

 $CV = E1 \times [(T_{PMCL} \times R_{PMCL}) - (T_{Operator} \times R_{Operator})] \times P$ 

Where:

CV = Credit Value

E1 = Total Number of Ordered E1s

TPMCL = Actual traffic terminated on PMCL Network from Operator Network per E1 for the last billing month

Toperator = Actual traffic terminated on Operator Network from PMCL Network per E1 for the last billing month

= PMCL Call Termination Charges as per Annex D

 $R_{Operator}$  = Operator Call Charges as per **Annex D** or **Attachment A3** (if applicable) P= 2.75 Months

- 20.5 The Credit Value and accordingly the Bank Guarantee and / or Pre-Payment Amount may be amended and notified by PMCL to Operator to:
  - (a) reflect changes in value of the Call Charges as stated in Annex D or Attachment A3(if applicable);
  - (b) reflect changes in the total Ordered Capacity;
  - (c) reflect changes in or in the calculation of taxes (if being included in the Invoice);
  - (d) reflect Charges for Services which were not being previously charged;
  - (e) reflect changes in actual traffic per E1 of the last billing month
- 20.6 The Operator shall provide the Security Deposit to PMCL prior to the date on which any PMCL Services are commenced hereunder and thereafter shall deposit the amended value of the Security Deposit, within fourteen (14) Calendar Days of the notification by PMCL in terms of Clause 20.4 and Clause 20.5. PMCL shall likewise return the Security Deposit (subject to replacement by Operator of the Security Deposit with that of the requisite amount) or part of the Security Deposit to reflect any downward revision of the Credit Value, calculated in accordance with Clause 20.5, within fourteen (14) Calendar Days of having received notice of the same from the Operator.
- 20.7 Notwithstanding anything to the contrary contained herein, in the event that PMCL determines that Charges for Services provided to Operator (not then paid for), exceed 60% of the Credit Value ("Threshold Value") either during a Billing Period or before an invoice has been paid, PMCL may issue a notice to the Operator ("Threshold Notice") seeking payment of the Threshold Value no later than five (5) Calendar Days from the date of

receipt of the Threshold Notice. In the event Operator fails to make payment of the Threshold Value in such time, PMCL shall be entitled to encash such amount from the bank under the Bank Guarantee. Any amount paid pursuant to a Threshold Notice shall be credited towards amounts due under an invoice to be issued for the Billing Period or if such invoice has already been issued, towards the payment for such invoice. Upon notification by PMCL of encashment of Bank Guarantee, the Operator shall replenish the Bank Guarantee within five (5) Business Days of encashment of such amount.

- 20.8 PMCL may at its discretion from time to time reasonably request information from the Operator to determine the ongoing creditworthiness of the Operator. The Operator shall provide such information to PMCL within five (5) Business Days of receipt of request from PMCL for such information. Depending on the information supplied, PMCL may decide to waive the requirement of provision of Security Deposit or to pay the Pre-payment Amount, as the case may be, from the Operator. PMCL shall have the right to withdraw such waiver at any time. A waiver of this nature can be exercised in favour of a Third Party Operator being provided Interconnection Services by PMCL, notwithstanding anything contained in Clause 38.
- 20.9 If the Operator fails to pay a sum or sums due by the Due Date, then PMCL shall be entitled at its sole discretion upon service of a written notice to the Operator to encash the Bank Guarantee for such sums due to PMCL by the Operator.
- 20.10 In the event PMCL encash the Bank Guarantee, pursuant to Clause 20.7 or Clause 20.9, the Operator shall immediately replenish the Bank Guarantee and PMCL may suspend the provision of Services in terms of Clause 15, until the Operator replenishes the Bank Guarantee to the Credit Value.
- 20.11 The Operator, at its sole discretion, may opt to pre-pay and/or provide Bank Guarantee for PMCL Services. In the event Operator chooses to pre-pay, the Operator, in accordance with the terms set out herein, shall make payment to PMCL for PMCL Services in advance of the provision of PMCL Services which shall constitute a credit in favour of the Operator. The Operator shall, prior to commencement of the PMCL Services, make payment of an amount equal to the Credit Value ("Pre-Payment Amount"). Thereafter, it shall make payment of the Pre-Payment Amount within seven (7) Calendar Days of being notified by PMCL that a balance of forty percent (40%) of the Pre-Payment Amount remains in credit in favour of the Operator after taking into account Services supplied to the Operator till the date of issuance of such notice. Any increase in Credit Value in terms of Clause 20.4 or Clause 20.5 hereof shall require payment by Operator to PMCL of an additional amount equal to such increase within seven (7) Calendar Days of the notification by PMCL of the increase in terms of Clause 20.4 or Clause 20.5 and the term Pre-Payment Amount shall be construed accordingly.
- 20.12 The provisions of this Clause 20 do not apply to CMOs unless otherwise mutually agreed.

#### 21. Dispute Resolution

- 21.1 The dispute procedure specified in this clause shall not apply to Billing Disputes, which shall be dealt with in accordance with the relevant **Annex E**.
- 21.2 It is understood and agreed that the Parties shall carry out this Interconnection Agreement in the spirit of mutual co-operation and good faith and shall seek to resolve amicably any disputes arising between them.
- 21.3 Without prejudice to the rights of either Party to suspend the provision of Services pursuant to **Clause 15**, during any period of dispute, before or until resolution, a Party, without prior approval of the Authority, shall not disrupt Services being provided to the other Party, or take any other actions, that might materially and adversely affect that Party's Services. Each Party shall continue to fulfil its obligations under this Agreement during the pendency of a dispute or any procedures.
- 21.4 The procedures set out as under are without prejudice to any other rights and remedies that may be available in respect of any breach of any provisions of this Agreement including urgent interlocutory relief.
- 21.5 Any time limits or provisions contained herein may only be varied by agreement of the Parties.
- 21.6 Either Party (the "**Disputing Party**") may invoke the dispute procedure specified in this clause, and if it wishes so to do it shall serve written notice of the dispute ("**Dispute**") to the Nominated Representative of the other Party (the "**Disputed Party**"). The notice shall contain all relevant details including the nature and the extent of the Dispute.
- 21.7 Following notice under **Clause 21.6** the Parties shall consult in good faith to try to resolve the Dispute involving the appropriate senior managers within fifteen (15) Business Days of serving the written notice of Dispute.
- 21.8 If the Parties do not reach an agreement on a Dispute raised through correspondence within fifteen (15) Business Days noted in **Clause 21.7**, either Party may notify to the other Party its intention to escalate the Dispute. If a notice of intention to escalate a Dispute has been provided by one Party to the other, the Parties shall promptly set up a committee with an equal number of appropriate representatives from either Party ("**Coordination Committee**")
- 21.9 The Co-ordination Committee shall meet within ten (10) Business Days of the receipt of notice under **Clause 21.8**. If the Co-ordination Committee has not resolved a Dispute within twenty (20) Business Days after it meets or is required to meet to review the Dispute:

- (a) either Party may refer the Dispute to the Authority with prior notice of intention to the other Party, such Dispute to be resolved in accordance with **Clause 22**; or
- (b) the Parties by mutual agreement may refer the Dispute to the arbitration, such arbitration to be conducted in accordance with **Clause 23**.
- 21.10 In the event of a reference to the Authority, both Parties shall compile a detailed dispute report, which shall include origin, nature, extent, issues and any proposals for resolution and make their respective reports available to the Authority and each other within 28 days of the referral.

#### 22 Reference to Authority for Dispute Resolution

- 22.1 The resolution of a Dispute referred to the Authority shall be conducted in accordance with the applicable provisions of the Pakistan Telecommunications Rules, 2000 and the Interconnection Dispute Resolution Regulations, 2004, and be subject to any final binding resolution imposed on the Parties by the Authority.
- 22.2 If the Authority does not have power under the Act to settle any Dispute, the Authority shall notify the Parties, and in such case either Party may refer the dispute to arbitration.

#### 23. Arbitration

- 23.1 A Dispute shall only be referred to arbitration in accordance with the provisions of **Clauses**21 and 22 and Annex E of this Interconnection Agreement. Each Party shall pay its own costs of arbitration and one half of the costs of the umpire.
- 23.2 The arbitration proceedings shall be held in Islamabad, Pakistan. The procedure shall be that provided in the Arbitration Act, 1940 and all subsequent amendments thereto.
- 23.3 The Dispute shall be settled by arbitration by 2 (two) arbitrators, 1 (one) each to be appointed by the Parties. In case of disagreement among the arbitrators or if they are unable to resolve the matter within 30 (thirty) Calendar Days thereafter, the matter shall be referred to an umpire nominated by both Parties or their arbitrators. The arbitrators and umpire:
  - (a) need not be Pakistan citizens or residents; and
  - (b) will not be an officer, director, or employee of a telecommunications company licensed in Pakistan or otherwise have a potential for conflict of interest.
- 23.4 If the Parties fail to appoint their arbitrator within fifteen (15) Business Days of referral of a Dispute to arbitration or the parties/arbitrators fail to appoint umpire, the arbitrator or umpire is to be appointed by the Chairman of the Authority.
- 23.5 Every Dispute referred to arbitration shall be arbitrated separately such that time limits for each Dispute are complied with.

23.6 The award given by the arbitrators or umpire shall be binding on the Parties.

#### 24. Limitation of Liability

- 24.1 Unless otherwise provided under this Interconnection Agreement and subject to **Clause**25, this **Clause** 24 shall regulate the liability (whether arising in contract, in tort, under statute or in any other way and whether due to negligence, wilful or deliberate breach, breach of statutory duty or any other cause) of a Party to the other Party under or in relation to this Interconnection Agreement and in relation to any act, omission or event relating to or arising out of this Interconnection Agreement.
- 24.2 Subject to **Clause 24.3**, if a Party is in breach of any of its obligations under this Interconnection Agreement to the other Party (excluding obligations arising under this Interconnection Agreement to pay moneys in the ordinary course of business), or otherwise (including liability for negligence or breach of statutory duty) such Party's liability to the other shall be limited to Rs. 2,500,000 (Rupees Two Million Five Hundred Thousand) for any one event or series of connected events and Rs. 10,000,000 (Rupees Ten Million) for all events (connected or unconnected) in any period of 12 Calendar Months.
- 24.3 Subject to **Clauses 24.4, and 24.6** neither Party shall be liable to the other Party whether in contract, in tort including negligence or statutory breach, under statute or otherwise for any cause for:
  - (a) any loss (whether direct or indirect) of profits, revenue, business, anticipated savings, wasted expenditure, or goodwill, or loss of data, or claims from Third Parties, or loss of value of any equipment (including software); or
  - (b) any other consequential or indirect liability, loss or damage, suffered by the otherParty and arising from or in connection with this Interconnection Agreement.
- 24.4 Subject to **Clause 24.5** neither Party excludes or restricts its liability for death or personal injury caused by its own negligence or liability arising thereof.
- 24.5 Each Party ("Indemnifying Party") shall indemnify, defend and hold harmless the other Party from any claims, losses or expenses arising out of any injury, sickness or loss of life of any employee, consultants, agents or contractors of the Indemnifying Party occurring in relation to this Interconnection Agreement what so ever.
- 24.6 Each provision of this **Clause 24** is a separate limitation applying and surviving even if one or more such provisions is inapplicable or held unreasonable in any circumstances.
- 24.7 For the avoidance of doubt, neither Party shall be liable for any breach of this Interconnection Agreement caused by the delay or failure of any supplier to deliver equipment to that Party at the prescribed time.

24.8 To the extent that an Annex contains a remedy in relation to the performance by a Party ("Liable Party") of an obligation under that Annex, that remedy shall be the sole and exclusive liability of the Liable Party, its affiliates, directors, employees, agents and contractors to the other Party in connection with the performance of that obligation and is the sole remedy of the other Party against the Liable Party, its affiliates, directors, employees, agents and contractors in connection with the performance of that obligation.

#### 25. Indemnification

25.1 Each Party ("Indemnifying Party") must indemnify and keep indemnified the other Party ("Indemnified Party"), its employees and agents against any loss (including Consequential Loss) which the Indemnified Party suffers or incurs as a result of or in connection with a claim by a Third Party relating to the Indemnified Party's supply of a Service to the Indemnifying Party or its use by the Indemnifying Party or any other person, or any delay or failure of the Indemnified Party to provide a Service other than to the extent that it is the result of a grossly negligent, willful or reckless breach of this Interconnection Agreement by the Indemnified Party.

#### 26. Intellectual Property Rights

- 26.1 Except as otherwise expressly provided in this Interconnection Agreement, all trade-marks, inventions, patents, copyrights, designs, design rights, trading names (whether or not registered) and all other intellectual property rights ("Intellectual Property") shall remain in the ownership of the person creating or owning the same and nothing in this
  - Interconnection Agreement shall confer or be deemed to confer on either Party any rights or licences in the Intellectual Property of the other Party or of any Third Party.
- 26.2 Neither Party shall be entitled to use any trademarks or service marks (whether registered or not) of the other Party in any document or other medium, without the prior written consent of the other Party.
- 26.3 The Parties shall negotiate arrangements (including in respect of title) concerning Intellectual Property jointly developed in the course of performing this Interconnection Agreement or otherwise in connection with this Interconnection Agreement.
- 26.4 Each Party (referred to in this clause as the "Indemnifying Party") agrees, to indemnify, and keep indemnified the other Party against all liability or loss arising directly or indirectly from, and all reasonable costs, charges and expenses incurred in connection with any claim, action, suit or demand alleging infringement by the other Party of the rights of a Third Party arising from use by the other Party of Intellectual Property disclosed or licensed by the Indemnifying Party under this Interconnection Agreement. This indemnification shall represent the only remedy and form of compensation available to the other Party in relation

- to Intellectual Property licensed or disclosed by the Indemnifying Party under this Interconnection Agreement.
- 26.5 Each Party shall be responsible and liable for obtaining and maintaining in that Party's name and at that Party's expense all licences, permits, consents, waivers, authorizations and Intellectual Property or other rights required for the provision of any Service to that Party or the installation or the use of any equipment in conjunction therewith for the entire duration during which the Services are provided or made available to that Party. Each Party shall provide reasonable co-operation to the other Party, at the other Party's cost, in relation to all licences, permits, consents, waivers, authorizations and Intellectual Property or other rights required to be obtained by the other Party under this clause.

# 27. Provision of Information

- 27.1 Each Party shall provide, free of charge, one copy of the information specified in Clause 27.3 and such other information as is reasonably required from time to time by the other Party for Interconnection and the provision of Services or facilities pursuant to this Interconnection Agreement.
- 27.2 Each Party shall promptly supply to the other, upon request, details of the services and facilities that it provides to its Customers.
- 27.3 Subject to a Party's obligations of confidentiality to a Third Party, a Party may request and the other Party shall provide information on protocols in use by that other Party that are required for Interconnection, conveyance of Calls or Short Messages or the provision of Services specified in this Agreement between the PMCL Network and the Operator Network if such other Party has relevant information and the provision of such information is necessary as a consequence of the absence of international standards.
- 27.4 Notwithstanding any provision of this Agreement, a Party shall not be obliged to provide information that is subject to a confidentiality obligation to a Third Party, unless such Third Party consents to such disclosure. If a Disclosing Party provides information to a Receiving Party, the Disclosing Party shall have obtained all appropriate Third Party consents.
- 27.5 The Disclosing Party shall use reasonable endeavours to ensure that information disclosed is correct to the best of its knowledge at the time of provision of such information.
- 27.6 The Receiving Party shall indemnify the Disclosing Party and keep it indemnified against all liabilities, claims, demands, damages, costs and expenses arising as a consequence of any failure by the Receiving Party to comply with the conditions imposed and identified at the time when the information was provided.

- 27.7 Nothing in this Agreement shall require a Party to do anything in breach of any statutory or regulatory obligation of confidentiality, including without prejudice to the generality of the foregoing, the PMCL License or the Operator License as appropriate.
- 27.8 Each Party shall provide the other Party on a timely basis with all agreed information reasonably required to determine Charges to be billed by one Party to the other Party.

#### 28. Confidentiality

- 28.1 Subject to the following provisions of this **Clause 28**, a Receiving Party shall keep in confidence the Confidential Information and shall not (and shall use its reasonable endeavours to ensure that its directors, employees, and professional advisers shall not) disclose such information to any Third Party without the prior written consent of the Disclosing Party.
- 28.2 A Receiving Party shall exercise no lesser degree of care of Confidential Information than would a reasonable person with knowledge of the confidential nature of the information. A
  - Receiving Party shall exercise no lesser security or degree of care than that Party applies to its own Confidential Information of an equivalent nature.
- 28.3 Information which is the subject of the provisions of **Clause 28.1** may be disclosed to agents, sub-contractors and professional advisers of the Parties hereto who have a need to know such information, provided that such agents, sub-contractors and professional advisers of the Parties undertake to comply with obligations equivalent to those set out in **Clause 28**.
- 28.4 A Receiving Party shall restrict disclosure of Confidential Information relating to the other Party to those persons who have a reasonable need to know. Confidential Information shall be used solely for the purposes for which it was disclosed.
- 28.5 A Receiving Party may disclose Confidential Information to an associated company or the Receiving Party shareholders, subject to the associated company or its shareholders undertaking to comply with obligations equivalent to those set out in this **Clause28**.
- 28.6 Unless otherwise agreed in writing, a Receiving Party shall not use the other Party's Confidential Information to provide commercial advantage to its retail business.
- 28.7 The following shall not constitute a breach of this **Clause28**:
  - (a) a disclosure authorized in writing by the Disclosing Party to the extent of that authority; or
  - (b) a disclosure to an Emergency Organization; or
  - (c) publication of all or part of this Agreement or details of it pursuant to the either Party's License except in so far as Authority has consented to the exclusion of any matter pursuant to the either Party's License; or

- (d) a disclosure that is properly made pursuant to the Operator License or the PMCL License or relevant statutory or other regulatory obligation; or
- (e) a disclosure properly and reasonably made to the Authority under Clause 17; or
- (f) a disclosure to an arbitrator, expert or any person appointed by the Parties for the resolution a Dispute; or
- (g) a disclosure to obtain or maintain any listing on any recognized stock exchange;

Subject to in the case of any disclosure specified in Clauses 28.7 (d) to (f) the Receiving Party informing the Disclosing Party as soon as reasonably practical, after such disclosure.

#### 29. Entire Agreement

29.1 This Interconnection Agreement together with its Annexes comprises the whole agreement between the Parties and supersedes all previous understandings, commitments, agreements or representations whatsoever, whether oral or written, in relation to the subject matter of this Interconnection Agreement.

#### 30. Severability

30.1 If any provision of this Interconnection Agreement is held to be illegal, invalid or unenforceable in any respect under any applicable law, then the remainder of this Agreement, or the application of such provision to other situations or circumstances shall not be affected, and the Parties agree to amend Agreement to reflect the original intention of the Parties and/or the valid directions of the Authority (where applicable) to the extent permissible by such applicable law

#### 31. Assignment

31.1 This Interconnection Agreement is personal to the Parties and unless otherwise agreed in writing, and subject to this clause, no rights, benefits or obligations under this Agreement may be assigned or transferred, in whole or in part.

#### 32. Notices and Invoices

- 32.1 All notices, demands, invoices or other communications required or permitted to be given or made under or in connection with this Interconnection Agreement shall be in writing and shall be sufficiently given or made if:
  - (a) delivered by hand, or courier service at the time of delivery; or
  - (b) sent by pre-paid registered post, on the third Business Day after posting; or
  - (c) sent by legible facsimile transmission when receipt of such facsimile transmission is confirmed by the printing of a transmission report (a copy thereof shall be sent immediately thereafter by pre-paid registered post), addressed to the intended recipient at its address or facsimile number set out below. Either

Party may from time to time notify the other Party of its change of address or facsimile number in accordance with this clause.

- 32.2 All notices, demands, invoices or other communication shall be sent/made to Nominated Representative.
- 32.3 A Party may notify the other Party to this Interconnection Agreement of a change to its name, relevant addressee, address or fax number for the purposes of **Clause 32.1** provided that such notification shall only be effective on:
  - (a) the date specified in the notification as the date on which the change is to take place;or
  - (b) if no date is specified or the date specified is less than five (5) Business Days after the date on which notice is given, the date falling five (5) Business Days after notice of any such change has been given.

#### 33. Governing Law

33.1 This Interconnection Agreement (and any dispute, controversy, proceedings or claim of whatever nature arising out of or in any way relating to this Interconnection Agreement or its formation) shall be governed by and construed in accordance with the laws of Pakistan.

#### 34. Force Majeure

- "Force Majeure" means, in relation to either Party, an event or circumstance beyond the reasonable control of that Party (the "Claiming Party") including, without limitation, acts of God, insurrection or civil disorder, war or military operations, national or local emergency, acts or omissions of government, or of any competent authority, compliance with any statutory obligation, industrial disputes of any kind (whether or not involving PMCL's or the Operator's employees), fire, lightning, explosion, flood, subsidence, weather of exceptional severity, acts or omissions of persons for whom neither Party is responsible, strikes, lock outs and other industrial disputes (in each case, whether or not relating to the Claiming Party's workforce or any other cause whether similar or dissimilar outside its reasonable control), provided, however that, Force Majeure in any event shall not include events, occurrences or circumstances which:
  - a) ought to have been reasonably foreseeable by a diligent operator receiving consideration for the provision of services and products to the other Party; and
  - b) which could have been prevented or avoided by a diligent operator.
- 34.2 Neither Party shall be liable for any breach (other than a breach of its obligations to make payments hereunder) of this Interconnection Agreement caused by Force Majeure.

- The Party initially affected by a Force Majeure shall promptly but not later than 72 hours following the Force Majeure event notify the other of the estimated extent and duration of its inability to perform or delay in performing its obligations ("Force Majeure Notification"). Failure to notify within the afore-said period shall disentitle the Party suffering the Force Majeure from being excused for non-performance for the period for which the delay in notification persists.
- 34.4 Upon cessation of the effects of the Force Majeure the Party initially affected by a Force Majeure shall promptly notify the other of such cessation.
- 34.5 If as a result of a Force Majeure, the performance by the Party initially affected of its obligations under this Interconnection Agreement is affected, such Party shall, subject to the provisions of **Clause 34.6**, perform those of its obligations not affected by a Force Majeure. In performing those of its obligations not affected by Force Majeure, the Party initially affected by Force Majeure shall deploy its resources such that (when taken together with other obligations to its Customers and Third Parties) there is no undue discrimination against the other Party.
- 34.6 To the extent that a Party is prevented as a result of a Force Majeure from providing all of the Services or facilities to be provided under this Interconnection Agreement, the other Party shall be released to the equivalent extent from its obligations to make payment for such services or facilities or complying with its obligations in relation thereto during the period of Force Majeure.
- 34.7 Following a Force Majeure Notification and if the effects of such Force Majeure continue for:
  - (a) a continuous period of not more than 6 months from the date of the Force Majeure Notification (whether or not notice of cessation has been given pursuant to **Clause 34.4**, any obligation outstanding shall be fulfilled by the Party initially affected by the Force Majeure as soon as reasonably possible after the effects of the Force Majeure have ended, save to the extent that such fulfilment is no longer possible or is not required by the other Party;
  - (b) a continuous period of six (6) months or more from the date of the Force Majeure notification (and notice of cessation has not been given pursuant to Clause 34.7(b), the Party receiving the Force Majeure Notification shall be entitled (but not obliged) to terminate this Agreement by giving not less than thirty (30) Calendar Days written notice to the other Party, provided that such notice shall be deemed not to have been given if notice of cessation is received by the Party receiving the Force Majeure notification prior to the expiry of the thirty (30) Calendar Days notice. If this Agreement is not terminated in accordance with the provisions of this Clause 34.7), any obligations outstanding shall be fulfilled by the Party initially affected by the Force Majeure as soon as reasonably possible after the effects of the Force Majeure have ended, save to

the extent that such fulfilment is no longer possible or is not required by the other Party.

#### 35. Waiver

- 35.1 No failure on the part of either Party to exercise, and no delay on its part in exercising, any right, power, privilege or remedy under this Interconnection Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power privilege or remedy preclude any other or further exercise thereof under this Interconnection Agreement or the exercise of any other right or remedy. Subject to **Clause 24** and any other clauses of this Interconnection Agreement specifying an exclusive remedy, the rights and remedies provided in this Interconnection Agreement are cumulative and not exclusive of any other rights or remedies (whether provided by law or otherwise).
- Any effective waiver shall be effective only in the instance and for the purpose for which it is given. Any consent or waiver by a Party under any provision of this Interconnection Agreement must be in writing signed by the Party or Parties to be so bound. Any such waiver or consent may be given subject to any conditions thought fit by that Party and shall be effective only in the instance and for the purpose for which it is given.

#### 36. Good Faith and Non-Exclusivity

- 36.1 Each of the Parties agrees that it shall act in good faith in relation to the other Party with respect to all matters relating to or contemplated by this Interconnection Agreement.
- 36.2 Notwithstanding any provisions of this Interconnection Agreement, neither Party shall be prohibited in any way whatsoever from entering into an agreement with another person for similar services.

#### 37. Independent Contractors and Agency

- 37.1 Each of the Parties is and shall remain at all times an independent contractor fully responsible for its own acts or defaults (including those of its employees or agents). Neither Party is authorised and neither of the Parties nor their employees, agents or representatives shall at any time attempt to act or act on behalf of the other Party to bind the other Party in any manner whatsoever to any obligations. Neither Party nor its employees, agents or representatives shall engage in any acts which may lead any person to believe that such Party is an employee, agent or representative of the other Party. Nothing in this Interconnection Agreement and no action taken by the Parties' pursuant to this Interconnection Agreement shall constitute, or be deemed to constitute, between the Parties a partnership, agency, association, joint venture or other cooperative entity.
- 37.2 If either Party appoints an agent for the purposes of this Interconnection Agreement, and notifies the other Party, then the other Party shall deal with the appointed agent for such

purposes until the first Party notifies the other Party that the appointment has been terminated.

#### 38. Non Discrimination

38.1 Neither Party shall unfairly discriminate in provision of interconnection services on terms which are more favourable or beneficial to the Third Party Telecommunication operators ("Third Party Operators") than those being provided to the other Party.

#### 39. Representations and Warranties

- 39.1 The Operator represents and warrants that:
  - (a) it has power to enter into and observe its obligations under the Interconnection Agreement; and
  - (b) it has in full force and effect the authorizations necessary to enter into the Interconnection Agreement, observe obligations under it and allow it to be enforced; and
  - (c) its obligations under the Interconnection Agreement are valid and binding and are enforceable against it in accordance with its terms; and
  - (d) the information provided by it to PMCL under this Agreement is (to the best of its knowledge) complete, true and correct, and not misleading.

#### 39.2 PMCL represents and warrants that:

- (a) It has power to enter into and observe its obligations under the Interconnection Agreement; and
- (b) It has in full force and effects the authorizations necessary to enter into the Interconnection Agreement, observe obligations under it and allows it to be enforced.
- (c) Its obligations under the Interconnection Agreement are valid and binding and are enforceable against it in accordance with its terms.
- (d) the information provided by PMCL to Operator under this Agreement is (to the best of its knowledge) complete, true and correct, and not misleading.

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

| [Pakistan Mobile Communications<br>Limited] | [   | Operator                | 1 |
|---|-----|-------------------------|---|
| By:<br>Name:<br>Title:                      | Ву: | Name:<br>Title:         | _ |
| Witnesses:                                  |     |                         |   |
| 1.<br>Name:<br>Address:                     |     | 2.<br>Name:<br>Address: |   |

# Annex A – Interconnection Agreement Signing Procedure

# Annex A - Interconnection Agreement Signing Procedure

- A Party licensed by the Authority to carry out telecommunication services as LL Operator, LDI Operator or CMO and seeking Interconnection in terms of this Reference Interconnect Offer shall apply for such Interconnection to PMCL by completing the form set out as Attachment A1 hereof.
- 2. The Parties shall within seven (7) Calendar Days of receipt of such completed application by PMCL, meet to discuss and/or agree, as the case may be, the following:
  - (a) The availability of Co-Location Space at requested Co-Location Sites;
  - (b) the Operator's Particulars and Service Requirements as set out in Attachment A2;
  - (c) the Operator Services and Charges as set out in Attachment A3 (if requested by PMCL);
  - (d) the Credit Value Determination as set out in Attachment A4;
  - (e) the Capacity Forecast as set out in Attachment C1; and
  - (f) the proposed Commissioning Date.
- Within thirty (30) Calendar Days of receipt of completed application, the Parties shall endeavor to agree upon modifications, if any, to Attachments A2, C1, A3 and A4 (which shall have been supplied as part of Attachment A1). In such event the Parties shall proceed to sign the Interconnection Agreement through their Authorized Signatories and shall attach the agreed Attachments A2, A3, and A4 to the Interconnection Agreement (which shall then become part of the Interconnection Agreement).
- 4. The Operator shall provide to PMCL the Security Deposit or Pre-Payment Amount in accordance with **Clause 20** of the main body of this Agreement.
- 5. Any application not in the form as set out in **Attachment A1** or otherwise not duly completed to PMCL's satisfaction shall not be considered. PMCL shall communicate to the Operator the deficiencies in the application, if any, within fifteen (15) Calendar Days of receipt. For avoidance of doubt the Operator shall complete **Attachments A2, C1, C11** and **A4**.
- 6. Operator shall provide a certified copy of a board resolution or other necessary authorization, authorizing its representative to sign the Interconnection Agreement on its behalf.

## 7. New Services

- 7.1 PMCL may from time to time amend its RIO to include New Services. If the RIO is amended to include New Services, which the Operator wishes to acquire, the Operator may accept such New Services from PMCL. The request for such New Services must be in the form set out in **Attachment A6**.
- 7.2 Within thirty (30) Calendar Days of the receipt of completed **Attachment A6** the Parties shall meet to agree upon any amendments (including but not limited to Charges and charging principles relating to New Services) that may be necessary to the Interconnection Agreement in light of the request for New Services and shall make such amendments as are agreed.

## 8. Additional Services

- 8.1 Additional Services are PMCL Services as defined in the Interconnection Agreement, but which are not currently being supplied to the Operator. If the Operator wishes to acquire an Additional Service from PMCL, it shall provide its request to PMCL. The request must be in the form as set out in **Attachment A7**.
- 8.2 On receipt of request for Additional Service(s), the procedures given in this **Annex A** will be deemed to apply in relation to request of Additional Service(s).

# **Attachment A1 – Request for Interconnection**

|          |                    |                            |                                      | Date                            | J     |
|----------|--------------------|----------------------------|--------------------------------------|---------------------------------|-------|
| Mr. [    |                    | ]                          |                                      |                                 |       |
| [        |                    | ]                          |                                      |                                 |       |
| Pakista  | an Mobile Comm     | unications Ltd             |                                      |                                 |       |
| 1-A, IB  | BC, F-8 Markaz,    |                            |                                      |                                 |       |
| Islama   | bad                |                            |                                      |                                 |       |
|          |                    |                            |                                      |                                 |       |
| Dear S   | Sir,               |                            |                                      |                                 |       |
|          |                    |                            |                                      |                                 |       |
| We he    | reby request PM    | CL to establish In         | Interconnection Link between Netw    | vorks of [ <i>Operator's na</i> | ame]  |
| and Pl   | MCL in terms of    | the Reference II           | Interconnect Offer issued by PMC     | L. By making this red           | quest |
| for Inte | erconnection we    | confirm our acce           | eptance of the terms and condition   | s set out in the main           | body  |
| of the   | Interconnection    | Agreement and              | the Annexes attached therewith.      | We also agree to exe            | cute  |
| the Inte | erconnection Agi   | reement in accor           | rdance with the procedures set out   | t in <b>Annex A</b> upon m      | utual |
| agreer   | ment on the matte  | ers set out in <b>An</b> ı | nex A.                               |                                 |       |
|          |                    |                            |                                      |                                 |       |
| We sul   | bmit herewith the  | following docum            | ments for your consideration duly c  | ompleted:                       |       |
|          |                    |                            |                                      |                                 |       |
| (a)      | Attachment A2      |                            |                                      |                                 |       |
| (b)      | Attachment A4      | ;                          |                                      |                                 |       |
| (c)      | Attachment C1      | ; and                      |                                      |                                 |       |
| (d)      | Attachment C1      | 1 and C12.                 |                                      |                                 |       |
|          |                    |                            |                                      |                                 |       |
| Mo olo   | o offer for vour   | ongidoration Car           | ruines that can be provided by up t  | o DMCL if DMCL oo               |       |
|          | -                  |                            | rvices that can be provided by us to | D PIVICE II PIVICE SO           |       |
| require  | es, and such Ser   | vices and Charge           | es are set out in Attachment A3.     |                                 |       |
| Kindly   | advise us of the   | date for a meetir          | ng to discuss our request herein.    |                                 |       |
|          |                    |                            | ng to discuss our request herein     |                                 |       |
| Regard   | ds                 |                            |                                      |                                 |       |
| Ü        |                    |                            |                                      |                                 |       |
|          |                    |                            |                                      |                                 |       |
| [Name    | of authorized Si   | gnatory]                   |                                      |                                 |       |
| [Design  | nation of authoriz | zed signatory]             |                                      |                                 |       |
|          |                    | •                          |                                      |                                 |       |
| [Signa   | tures]             |                            |                                      |                                 |       |
| -        |                    |                            |                                      |                                 |       |

# **Attachment - A2 Operator's Particulars and Services Requirements**

|            |  |  |  | Dated []                                     |  |  |  |
|------------|--|--|--|--|--|--|--|
| 1.         | Oper   | ators' Parti   | culars                                   |  |  |  |  |
| 1.1        | Nam  | e of the Ope   | rator [                                  |  |  |  |  |
| 1.2        | Addr   | ess  | Į  | 1  |  |  |  |
| 1.3<br>1.4 | Phor<br>Emai   |  |  | ] Fax [                                      |  |  |  |
| 2.         | Refe   | rences No.   |  |  |  |  |  |
|            | (a) (  | Company Re   | gistration No. [                         | <u>l</u>                                     |  |  |  |
|            | (b) L  | icense Nos.<br> <br> <br>  | ], [<br>], [<br>], [                     | ], [ ], [ ],<br>], [ ], [ ],<br>], [ ], [ ], |  |  |  |
| 3.         | Oper<br>(a)  |  | nsed Services<br>tance and International | []   |  |  |  |
|            | (b)  | Local Lo   | ор                                       |  |  |  |  |
|            |  | (i)  | Fixed L Local Loop                       | []   |  |  |  |
|            |  | , ,  |  | []   |  |  |  |
|            | (c)  | Cellular I   | Mobile                                   | []   |  |  |  |
| 4.         | (a) V  | nsed Territo<br>Vhole of Pak<br>No. of PTCL  |  | [ ]<br>[ ]                                   |  |  |  |
|            | List (   | List Of PTCL Regions where Licenses have been Awarded  |  |  |  |  |  |
|            | (i) (ii) (iii) (iv) (v) (vi) (viii) (viii) (ix) (xi) (xii) (xiii) (xiii) (xiv) | NTRI<br>NTRII<br>HTR<br>ITR<br>RTR<br>GTR<br>LTRI<br>CTR<br>FTR<br>MTR<br>STRI<br>KTR<br>STRV<br>WTR |  | [] [] [] [] [] [] [] [] [] [] [] [] [] [     |  |  |  |
| 5.         |  |  | quested By the Operator:                 |  |  |  |  |
|            | (a)  |  | nation Services                          | []   |  |  |  |
|            | (b)  |  | sage Conveyance Services                 |  |  |  |  |
|            | <u>(c)</u>   | <u>ıvıuıtımedia</u>  | Message Conveyance Services              | Ц  |  |  |  |

(d) Video Calling

П

## 6. Interconnection Sites Required

## 6.1 PMCL's Co-Location Sites

| No. | Location                               | Site Required (please tick) |
|-----|--|-----------------------------|
| 1.  | Islamabad                              |                             |
| 2.  | Faisalabad                             |                             |
| 3.  | Lahore                                 |                             |
| 4.  | Karachi                                |                             |
| 5.  | Jehlum (subject to activation)         |                             |
| 6.  | Sahiwal (subject to activation)        |                             |
| 7.  | Sargodha (subject to activation)       |                             |
| 8.  | Hyderabad (subject to activation)      |                             |
| 9.  | Gujranwala (subject to activation)     |                             |
| 10. | Gujrat (subject to activation)         |                             |
| 11. | Peshawar (subject to activation)       |                             |
| 12. | Sialkot (subject to activation)        |                             |
| 13. | Rahim Yar Khan (subject to activation) |                             |
| 14. | Multan (subject to activation)         |                             |
| 15. | Quetta (subject to activation)         |                             |
| 16. | Sukkur (subject to activation)         |                             |

| 6.2 Operator's Co-Location S | 3ites |
|------------------------------|-------|
|------------------------------|-------|

| a)    |  |
|-------|--|
| (b)   |  |
| (c)   |  |
| (d) [ |  |

## 6.3 Third Party Interconnection Site

| No. | Location                               | Site Address |
|-----|--|--------------|
| 1.  | Islamabad                              |              |
| 2.  | Faisalabad                             |              |
| 3.  | Lahore                                 |              |
| 4.  | Karachi                                |              |
| 5.  | Jehlum (subject to activation)         |              |
| 6.  | Sahiwal (subject to activation)        |              |
| 7.  | Sargodha (subject to activation)       |              |
| 8.  | Hyderabad (subject to activation)      |              |
| 9.  | Gujranwala (subject to activation)     |              |
| 10. | Gujrat (subject to activation)         |              |
| 11. | Peshawar (subject to activation)       |              |
| 12. | Sialkot (subject to activation)        |              |
| 13. | Rahim Yar Khan (subject to activation) |              |
| 14. | Multan (subject to activation)         |              |
| 15. | Quetta (subject to activation)         |              |
| 16. | Sukkur (subject to activation)         |              |

| 7.            | Propos                                  | ed Commissionino  | g Date       | ]       |             | ]              |
|---------------|---|---|--------------|---------|-------------|----------------|
| 8.            | Credit I<br>(a)<br>(b)                  | Management Optic<br>Bank Guarantee<br>Prepayment                | ons:         | ]       | ]           |                |
| 9.            | The Op                                  | erator's Nominate   | d Representa | tive    |             |                |
|               | Name                                    | [_  |              |         |             | <u>l</u>       |
|               | Designa<br>Phone of<br>Email<br>Specim  |   |              | ] Fax [ | ]           | <u>]</u><br>_] |
| <b>9.</b> 9.1 |   | Shareholders and<br>e and Addresses of<br>[<br>[<br>[<br>[<br>[ |              |         | more shares |                |
| 9.2           | Name<br>(a)<br>(b)<br>(c)<br>(d)<br>(e) | and Addresses of [ [ [ [ [                                      | Directors    |         |             |                |
| Name o        | of Author                               | ized Signatory of O   | perator      | [       |             | 1              |
|               |   | Authorized Signatory uthorized Signatory                        |              | [       |             | <u>]</u>       |
|               |   |   | Compan       | y Stamp |             |                |

41

# Attachment A3 – Operator Services and Charges to PMCL

| 1.                                  | Services Provided By the Operator          |                   |          |  |  |  |
|-------------------------------------|--|-------------------|----------|--|--|--|
|                                     | (a) [                                      | <u> </u>          |          |  |  |  |
|                                     | (b) [                                      | ]                 |          |  |  |  |
|                                     | (c) [                                      | ]                 |          |  |  |  |
|                                     | (d) [                                      | 1                 |          |  |  |  |
| 2.                                  | Operator's Tariff                          | Operator's Tariff |          |  |  |  |
|                                     | a) []                                      |                   |          |  |  |  |
|                                     | (p) [                                      | (b) []            |          |  |  |  |
|                                     | (c) [                                      |                   |          |  |  |  |
|                                     | (d) [                                      | <u> </u>          |          |  |  |  |
| Offe                                | red by Operator                            |                   |          |  |  |  |
| Nam                                 | e of Authorized Signatory                  | [                 | ]        |  |  |  |
| Desi                                | gnation of Authorized Signatory            | [                 | _]       |  |  |  |
| Signa                               | atures of Authorized Signatory             | [                 | _]       |  |  |  |
| PMC<br>Nam                          | EL Acceptance<br>e of Authorized Signatory | [                 | ]        |  |  |  |
| Designation of Authorized Signatory |  | [                 | <u>_</u> |  |  |  |
| Signa                               | atures of Authorized Signatory             | [                 | _]       |  |  |  |

# Attachment A4- Credit Value Determination

|                                     | Months from<br>ber of Order   | n commencement o   | f PMCL Service                | <u>es</u> :  |                          |                          |    |
|-------------------------------------|-------------------------------|--|-------------------------------|--------------|--------------------------|--------------------------|----|
| Total Nulli                         | bei oi oidei                  | eu L 13  |                               | . 1          |                          |                          |    |
|                                     |                               | n Charge as per <b>Ann</b><br>ause 20.3 of main bo   |                               | [Rs.<br>[Rs. | Per Mi                   | nute ]<br>]              |    |
|                                     | t Six Months<br>last three-mo |  |                               |              |                          |                          |    |
| No.                                 | Month                         | Ordered<br>Capacity<br>E1s   | Actual<br>Minutes             |              |                          |                          |    |
| 1.                                  |                               |  |                               |              |                          |                          |    |
| 2.                                  |                               |  |                               |              |                          |                          |    |
| 3.                                  |                               |  |                               |              |                          |                          |    |
| Total                               |                               |  |                               |              |                          |                          |    |
| Average                             | Minutes per                   | E1   |                               |              |                          |                          |    |
| PMCL Call<br>Operator C             | Charge as pe                  | red E1s<br>n Charge as per <b>Ann</b><br>er <b>Annex D</b> or <b>Attacl</b><br><b>ause 20.4</b> of main bo | h <mark>ment A3</mark> (if ap |              | [<br>[Rs.<br>Rs.<br>[Rs. | Per Minute<br>Per Minute |    |
| Name of A                           | uthorized Si                  | gnatory  | [                             |              |                          |                          | _] |
| Designation of Authorized Signatory |                               |  | [                             |              |                          |                          | _1 |
| Signature (                         | of Authorize                  | d Signatory  | ſ                             |              |                          |                          | 1  |

# Attachment A5 – Authorization to Nominated Representative

Letter of Authorization

| To,                           |              |                               |       |
|-------------------------------|--------------|-------------------------------|-------|
| [PMCL or Operator]            |              |                               |       |
| [PMCL or Operator             |              | ] hereby nominate             | Mr. [ |
| •                             | enresentativ | e for the purposes of the Int | -     |
| between PMCL and [            | procentativ  | ]. His particulars are (      | _     |
|                               |              |                               |       |
| Phone & Fax                   | [            | ] Fax [                       | 1     |
| Email                         | [            |                               | 1     |
| Address                       | ]            |                               | ]     |
|                               | [            |                               | 1     |
|                               | ]            |                               | 1     |
| Specimen Signature            | ]            |                               | 1     |
| Authorized by                 |              |                               |       |
| Name of Authorized Signatory  | of PMCL/0    | Operator [                    | ]     |
| Designation of Authorized Sig | natory       | [                             | ]     |
| Signatures of Authorized Sign | atory        | []                            | ]     |
| Company Stamp                 |              |                               |       |

# **Attachment A6 - Request for New Services**

| Mr. [  |  |
|--|--|
| [  | 1  |
| Pakistan Mobile Commur                               | nications Ltd  |
| 1-A, IBC, F-8 Markaz,                                |  |
| Islamabad  |  |
| Dear Sir,  |  |
| We hereby request Pakis<br>Services as offered by PN | tan Mobile Communications Limited to provide us the following New MCL. |
| [ ]<br>[ ]   |  |
| We hereby submit the following                       | lowing documents for your consideration duly completed:                |
| Kindly advise us of the da                           | ate for a meeting to discuss our request herein.                       |
| Regards,   |  |
| [Name of Authorized Sign                             | natory]  |
| [Designation of Authorize                            | d Signatory]   |

# **Attachment A7-Request for Additional Services**

| Mr. [  | 1   |
|--|---|
| ]  | 1   |
|  |   |
| Pakistan Mobile Communi                            | ications Ltd  |
| 1-A, IBC, F-8 Markaz,                              |   |
| Islamabad  |   |
|  |   |
| Dear Sir,  |   |
|  |   |
| We hereby request Pakis Additional Services as off | tan Mobile Communications Limited to provide us the following ered by PMCL. |
| [ ]  |   |
| i i  |   |
| We hereby submit the foll                          | lowing documents for your consideration duly completed:                     |
| Kindly advise us of the da                         | ate for a meeting to discuss our request herein.                            |
| Regards,   |   |
| [Name of Authorized Sign                           | natory]   |
| [Designation of Authorize                          | d Signatory]  |

## **Attachment A8 - Bank Guarantee Form**

| [Date]                |  |  |   |  |
|-----------------------|--|--|---|--|
|                       | Mobile Communications L<br>, F-8 Markaz,<br>ad   | imited   |   |  |
| Dear Sirs,  GUARANTEE |  |  |   |  |
|                       |  | le Communications Limited ("PMCL") have ente ("Agreement") with [M/s of  | ered into _] ("Operator").  |  |
| an unco               | nditional and irrevocable Ba<br>/- (Ru   | onnection Agreement envisages that the Opera<br>ank Guarantee in the amount of Rs.<br>upees only) by way<br>Operator to PMCL under the Interconnection Ag  | tor shall provide   |  |
|                       | NOW THEREFORE B  | ·  |   |  |
| agree a               | nd undertake as under:-  | , , ,  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   |  |
| 1.                    | (i) Due payment to you within two days after notice of demand of any claim that you make upon us under this Guarantee within the validity of this Guarantee, stated to be relation to non-payment of amounts due from the Operator to PMCL under Interconnection Agreement. We undertake that such amount demanded shall settled/paid by us without reference to the Operator and notwithstanding that there may a dispute (whether bona fide or otherwise) between the Operator and yourself regardless of whether or not such amount is payable by the Operator and/or on behalthe Operator. |  | e, stated to be in MCL under the anded shall be hat there may be nd yourself and                    |  |
|                       | make upon us under this (<br>not by a date seven days p<br>the satisfaction of PMCL i<br>such amount demanded sh<br>notwithstanding that there   | thin two days after notice of demand of any classifications and the control of this Guarantee within the validity of this Guarantee prior to the expiry of this Guarantee provided a range of the Interconnection Agreement. When all be settled/paid by us without reference to the may be a dispute (whether bona fide or otherword of the Operator. | e, if Operator has<br>new guarantee to<br>e undertake that<br>the Operator and<br>rise) between the |  |
| 2.                    | . We further guarantee, undertake and agree as under:  |  |   |  |
| (a)                   | maximum guarante   | tee may be invoked all at once or in parts<br>ee amount noted herein) and shall be enforc<br>inst us, our legal representatives, successors an   | eable by you or   |  |
| (b)                   |  | ee shall be a continuing guarantee subject to c<br>shall not be considered as satisfied by a   |   |  |

3.

4.

5.

WITNESSES

| (c) | Without prejudice to and affecting your rights against us hereunder, you shall be a liberty at any time to vary or compromise the terms or conditions of the Interconnection Agreement or grant any indulgence or time to the Operator.  |  |
|-----|--|--|
| (d) | Our obligations hereunder shall be continuing obligation subject to clause No. 5 given below notwithstanding that any claim by PMCL against the Operator is disputed or contested.   |  |
| (e) | This Guarantee shall be in addition to and shall not be in any way prejudiced any collateral or other security now or hereafter held by you as security or any to which you may be entitled.   |  |
| (f) | Any demand or notice in respect hereof shall (without prejudice to any other mode of effecting the same) be deemed to have been given by you upon the expiry of 24 hours after the posting by you of the same as written notice thereof by ordinary mail addressed to our address(es) given below or last known address(es). A certificate signed by an officer of PMCL shall be conclusive evidence that the notice was so sent. This certificate will also include the claim against ou guarantee and should be received by us within validity of this guarantee during banking hours. |  |
| (g) | A certificate in writing signed by one of your officers and certifying the total amoundue to you at any time from the Operator shall be conclusive evidence of the matters so certified. In any case our liability under this guarantee will not exceed the amount noted in clause 4 and all claims must be filed by the expiry date noted in clause 5.  |  |
| (h) | Independently of the above stipulations we further agree to be liable as a principal debtor or principal debtors for the payment of any moneys secured hereunder under our guarantee as may not be recoverable from us as surety by reason of the legal disability of the Operator or of any limitation of the Operator's contractual powers whether such disability or limitation be known to you or not.   |  |
|     | We represent and undertake that we have complied with all necessary regulations with respect to this guarantee.  |  |
|     | Our liability hereunder shall not exceed the (aggregate) sum of Rs (Rupees only).  |  |
|     | All claims under this guarantee shall be filed with us on or before, at the following address :  |  |
|     |  |  |
|     |  |  |
|     | Attention :  |  |
|     | Yours faithfully,  |  |
|     | For and on behalf of   |  |
|     |  |  |

Address

**Annex B – Services** 

## **Schedule B1- Call Termination Services**

#### 1. General Terms

- 1.1 The Parties will supply the Call Termination Services in accordance with Clauses 3.1, 3.2 and 10 of the main body of the Interconnection Agreement.
- 1.2 Notwithstanding Interconnection, PMCL shall have no obligation to provide Call Termination Services in respect of Calls of any type other than those set out in Clause 4 of this Schedule B1 for PMCL's Call Termination Services, and Operator shall have no obligation to provide Call Termination Services in respect of Calls of any type other than those set out in Clause 5 of this Schedule and/or Attachment A3, if requested and agreed, for Operator's Call Termination Services ("Terminating Interconnected Calls").
- 1.3 PMCL will only be required to provide the Call Termination Service to the Operator to the extent that the Operator has complied with the provisions of Annex C and this Schedule B1.

#### 2. Information Collection for Call Termination Services

- 2.1 Each Party will provide the following information to the other Party thirty (30) Calendar Days prior to the commencement of the Call Termination Services:
  - (a) Call Type Name and Description A general description of Call Type.
  - (b) Date to be introduced (Proposal) The preferred implementation date for access to be available.
  - (c) Trunk Group (Circuit Assignment) How traffic of the Call Type will be routed, as well as which Trunk Groups are to be used at the IGSs.
  - (d) Other Engineering Requirements- A list of other requirements for the Call Type, such as routing of traffic of mass Calls on choked circuits

## 3. Charging Principles

- 3.1 For any Terminating Interconnected Calls terminating in a Party's Network, such Party will collect the Termination Charge from the other Party and the other Party shall be obligated to make payment for the same. For the avoidance of doubt, the Call
  - Termination Service by PMCL is not provided for termination of Calls to Third Party Networks.
- 3.2 Each Party shall, for those Terminating Interconnected Calls for which it is providing (as the case may be) or receiving a Call Termination Service, collect a Call Detail Record ("CDR") for each individual Terminating Interconnected Call and process such records in accordance with Clause 3.10 of this Schedule.

- 3.3 The Call Detail Records collected by a Party in accordance with this Clause 3 shall be the source of the data used by such Party to invoice for the Call Termination Service it provides under this Interconnection Agreement.
- 3.4 The calculation of Charges for the Call Termination Service for Successful Calls will be based on the Call Durations recorded on the basis set out in Clauses 3.5 and 3.6 of this Schedule and in accordance with the applicable rates set out in Annex D as amended from time to time.
- 3.5 The Charges for <u>Domestic and/or International Call Termination Services provided by the Parties shall be accounted on per minute basis by accumulating the total traffic in terms of seconds and then converting these to rounded minutes by dividing the sum total by sixty (60) for as follows.</u>:

For Domestic and/or International Call Termination Service, the Charges shall be on per minute basis by accumulating the total traffic in terms of seconds and then converting these to rounded minutes by dividing the sum total by sixty (60).

- 3.6 Only Successful Calls shall be subject to charging and no charges shall be due on unsuccessful or unanswered Calls. Successful Calls shall be charged for the duration of use of the circuit for the Call Duration.
- 3.7 Charges shall not apply for Calls made to:
  - (a) Invalid numbers
  - (b) A called station that is already engaged unless the called station successfully diverts such Call.
- 3.8 In case Operator's Call Termination Charges have different rates for different time zones ("Charge Rate Periods") and if Call Duration of a Successful Call extends over two (2) or more Charge Rate Periods, the Call shall be charged and paid to the Operator in accordance with the principles set out in Annex D.
- 3.9 Any Calls for which the CDRs are not collected during the applicable Billing Period will be invoiced in the next Billing Period.
- 3.10 Each Party shall use its reasonable endeavours\_to provide Invoice and Billing Statement for the Call Termination Service in accordance with **Annex E** within fifteen (15) Calendar Days from the end of each Calendar Month.
- 3.11 Any Call having CLI out of Number Plan of the Party routed through the Party's Network shall be payable by that Party which is terminating the traffic onto the other Party's Network.

3.12 The Calls received through other Party's Network which does not have "A" number shall be treated, for the purpose of this Agreement, as Domestic or International Calls depending on the Trunk Group through which the Call is delivered.

## 4. List of Call Types for Call Termination Services by PMCL

- 4.1 International Calls through LDI Operator for termination on PMCL Network.
- 4.2 Domestic Calls from (or through) LDI Operator, LL Operator and CMOs for termination on PMCL Network.

### 5. List of Call Types for Call Termination Services by Operator

5.1 Domestic Calls to be terminated by PMCL onto Operator's Network in case of Operator being LL Operator or CMO.

## 6. Call Routing Principles

- 6.1 The Parties shall follow Far End Call Handover principle to deliver calls to other Party's network in the following manner, unless otherwise directed by the Authority:
  - (I) For Local Loop Operators:
    - (i) The Interconnection will take place only if the POI is located at a place where the LL Operator is licensed to operate ("LL Licensed Area").
    - (ii) The Interconnection will be limited:
      - in case of Calls or Short Messages to Operator Network, to Customers of LL Operator within the Numbering Plan of the LL Operator for the LL Licensed Area where the POI is located; and
      - (b) in case of Calls or Short Messages to the PMCL Network, to the Customers of PMCL within the Numbering Plan of PMCL designated for the Switch connected to that POI by PMCL from time to time;
    - (iii) A Party shall block all Calls from the Network of the other Party if such Calls are for numbers outside the Numbering Plan described in sub-Clause (ii) above in relation to such Party.

## (II) For CMOs:

- (i) Calls originating in the Network of one Party shall be handed over at the POI connected to the Switch of the other Party to which the called number is designated from time to time by the other Party according to its Numbering Plan;
- (ii) A Party shall block Calls from the Network of the other Party if such Calls are handed over to that Party otherwise than in accordance with sub-clause (i) above.

## (III) For LDI Operators:

- (i) Calls to be terminated in the PMCL Network shall be handed over at the POI connected to PMCL Switch to which the called number is designated from time to time by PMCL according to its Numbering Plan;
- (ii) PMCL shall block Calls from the Operator Network if such Calls are handed over to PMCL otherwise than in accordance with sub-clause (i) above.
- 6.2 The numbering series shall be exchanged in the form set out in **Attachment C6**.

## Schedule B2 - Conveyance of Short Messages

#### 1 General

- 1.1 This Schedule shall apply to the conveyance of Short Messages from the Network of one Party to the Network of the other in case both Parties have the capability to provide and agree to provide to each other such Service.
- 1.2 Subject to the provisions of this Schedule B2, each Party shall convey to its appropriate network terminating point, Short Messages handed over from the Network of the other Party ("Short Message Conveyance Services") in accordance with Clause 10 of the main body of the Interconnection Agreement.
- 1.3 The Parties shall agree in advance all necessary technical requirements (including set up and clear down sequences) for the supply of Short Message Conveyance Services pursuant to this Schedule B2.
- 1.4 Each Party shall in accordance with such Party's normal engineering practices, correct faults which occur in its Network which affect the conveyance of Short Messages. For the avoidance of doubt, neither Party warrants that its Network is, or will be, free from faults.
- 1.5 Wherever applicable each Party shall supply Short Message Conveyance Services commencing on a date to be agreed in writing between the Parties.

## 2. Charging Principles

2.1 The Parties agree to pay Charges for termination of Short Messages on other Party's network in accordance with **Clause 3** of **Annex D** of this Agreement.

## 3. Routing Principles

3.1 The Parties shall agree upon the principles for routing of Short Messages between the Networks unless there is a valid determination by the Authority on this matter, in which case such determination shall be followed by the Parties.

## 4. SMSC Number Information

4.1 The Parties will provide to each other their respective SMSC numbers for provision of Short Message Conveyance Service.

### 5. Customer Relationship

5.1 Each Party shall ensure that Short Message Conveyance Service shall not be used to advertise its services to the other Party's Customers. Additionally, if any of the Parties experience complaints from its Customers regarding the reception of Short Messages having commercial content (for example bulk SMS containing advertising/promotional message sponsored by Third Parties) it shall constitute breach of the Agreement. In the event of the foregoing breach by one Party, the other shall have the right to terminate the Short Message Conveyance Service by providing seven (7) Calendar Days notice to the Party in breach, in which period the other Party shall take necessary steps to correct the situation. In case the correction has not taken place, the other Party shall have the right to immediately terminate the Short Message Conveyance Service provided to the Party in breach, with approval of the Authority.

## Schedule B3 – Physical Interconnection and Co-Location Services

## 1. General

- 1.1 Subject to Clause 12 of the main body of this Interconnection Agreement, this Schedule sets out the terms and conditions under which PMCL may provide the Operator with physical interconnection, Co-Location Space and physical access thereto at PMCL's Co-Location Sites listed in Attachment C3 as amended from time to time solely for the purpose of offering Interconnection services. If PMCL requires physical interconnection, Co-Location Space and physical access thereto from the Operator, the Operator will provide such Interconnection on reciprocal terms and conditions of this Schedule B3.
- 1.2 The Operator shall provide at its own cost all Interconnect Equipment, installation materials and manpower needed for the installation of its Interconnect Equipment at the Interconnection Sites.
- 1.3 Each Party shall be responsible for providing adequate insurance cover for its own Interconnect Equipment located within the Co-Location Sites (or at Third Party Interconnection Sites). Neither Party shall be responsible or liable to the Other Party for any loss of or damage to the Other Party's Interconnect Equipment at the Interconnect Sites caused by fire, water leakage, air-conditioning/mechanical ventilation failure, power fluctuation/interruption, or anything beyond the Party's control at the Interconnection Site or caused by an act or omission of a Third Party.

#### 2. Charging Principles

2.1 Charges for Co-Location shall be as set out in Annex D, as amended from time to time by the Parties, subject to approval by the Authority, which shall not apply in case of Interconnection at Third Party Interconnection Site unless otherwise agreed.

## Schedule B4 - Conveyance of Multimedia Messages

#### 1. General

This Schedule shall apply to the conveyance of Multimedia Messages from the MMS Network of a Party to the MMS Network of the other, in case both Parties are CMOs and both have the capability to provide and agree to provide to each other such Service. This Schedule shall also apply to other operators, besides CMOs, once the conveyance of MMS is technically and commercially feasible between these networks and both parties agree to provide such services to each other.

Subject to the provisions of this **Schedule B4**, each Party shall convey to its appropriate network terminating point, Multimedia Messages handed over from the Network of the other Party ("**Multimedia Message Conveyance Services**") in accordance with **Clause 10** of the main body of the Interconnection Agreement.

The Parties shall agree in advance all necessary technical requirements (including set up and clear down sequences) for the supply of Multimedia Message Conveyance Services pursuant to this **Schedule B4**.

Each Party shall in accordance with such Party's normal engineering practices, correct faults which occur in its Network which affect the conveyance of Multimedia Messages. For the avoidance of doubt, neither Party warrants that its Network is, or will be, free from faults.

Wherever applicable each Party shall supply Multimedia Message Conveyance Services commencing on a date to be agreed in writing between the Parties.

## 2. Charging Principles

2.1 The Parties agree to pay Charges for termination of Multimedia Messages on other Party's network in accordance with Clause 3 of Annex D of this Agreement.

#### 3. Routing Principles

3.1 The Parties shall agree upon the principles for routing of Multimedia Messages between the Networks unless there is a valid determination by the Authority on this matter, in which case such determination shall be followed by the Parties.

## 4. MMSC Number Information

4.1 The Parties will provide to each other their respective MMSC numbers for provision of Multimedia Message Conveyance Service.

## 5. Customer Relationship

5.1 Each Party shall ensure that it, or its employees, agents or contractors, shall not use MMS to advertise its services to the other Party's Customers. Additionally, if any of the Parties experience complaints from its Customers regarding the reception of MMS Messages having commercial content (for example, bulk or other MMS Messages containing advertising/promotional message sponsored by third parties) it shall constitute breach of the Agreement. In the event of any of the foregoing breaches by one Party, the other shall have the right to terminate the Multimedia Message Conveyance Services being provided to the other Party by providing 7 Calendar Days notice to the party in breach, in which period the Party in breach shall take necessary steps to correct the situation. In case the correction has not taken place, the other Party shall have the right to immediately terminate the MMS Message termination service provided to the Party in breach.

**Annex C - Technical** 

## Annex C - Technical

#### 1. General

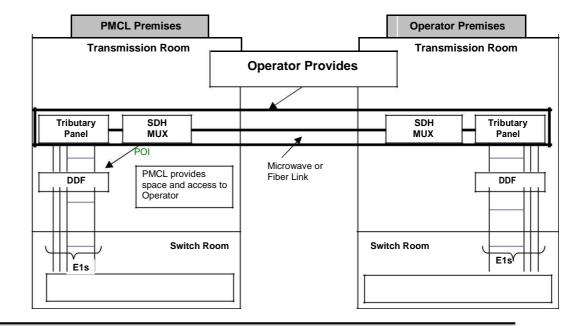
1.1 This Annex inter alia describes the Interconnection procedures, standards and Network interface requirements for establishment of Interconnection between the PMCL Network and the Operator Network.

# **Schedule C1- Physical Interconnection**

#### 1. General

- 1.1 Subject to the provisions of Clauses 10 and 12 of the main body of the Interconnection Agreement, the terms of Schedule B3, and to availability of space (including but not limited to footprint and tower space) PMCL shall provide Interconnection facilities at all or any one of the Co-Location Sites as specified in Attachment C3. At PMCL's request the Operator shall also provide Interconnection facilities at Co-Location Sites of the Operator.
- 1.2 Operator may in terms of Clause 12.5 of the main body of the Interconnection Agreement procure space at such Third Party Locations where PMCL Interconnection Equipment is located for the purposes of Interconnection, in the event that PMCL is unable to provide the Operator with space for interconnection in terms of Clause 12.4 of the main agreement.
- 1.3 As shown in the diagram below, the POI at Co-Location Site shall be the DDF. The cabling from Tributary Panel to DDF shall be done by PMCL at its own cost.

#### **Physical Interconnection**



GM SC GMSC

- 1.4 Installation of equipment and laying of cables up to POI at PMCL's Co-Location Site shall be the responsibility of the Operator, whereas PMCL shall be responsible for the extension of the link from Tributary Panel through its DDF to the MSC.
- 1.5 Subject to the availability of space and tower loading capacity and pursuant to **Schedule**B3, PMCL shall provide the Operator space on its tower to install antennas, the sole purpose of which is to facilitate Interconnection.
- 1.6 In case there is no space on the tower for microwave dish, the Operator shall establish its transmission link on Optical Fibre laid and commissioned up to the Co-Location Site at its own end-to-end cost.
- 1.7 In case of Interconnection at Third Party Co-Location Sites as set out in Attachment C4 the POI shall be PMCL's DDF located at that Third Party Co-Location Site. The Operator shall be responsible at its own cost for all the cabling up to POI and installation of its Interconnect Equipment at that site.
- 1.8 Each Party is responsible for the provisioning, maintenance and operation of Interconnect Equipment (including that Network equipment which forms part of the Interconnect Links and the transmission equipment) on its "side" of the POI at its own cost.
- 1.9 At PMCL Co-Location Sites, the Interconnect Equipment shall be placed in a lockable Cabinet of the following size, which may be varied by the Parties mutually:

#### Height - 84 X Depth - 24 X Width - 24 Inches

- 1.10 The cost of the Interconnect Equipment including but not limited to microwave dish, cabling, transmission equipment, Multiplexing, Tributary Panel, Optical Fibre transmission equipment and lockable cabinet or rack on its side of POI shall be borne by each Party. The cost of the installation, maintenance and operation of the Network equipment that form part of the Interconnection Links on its side of POI shall be borne by that Party.
- 1.11 Each Party shall ensure that its Interconnect Equipment that forms part of the Interconnect Link(s) is provisioned and maintained with Interconnect Capacity in accordance with the Forecast agreed in terms of Schedule C3.
- 1.12 The Operator shall provide detailed specifications of the equipment to be installed at Co-Location Site including but not limited to microwave dishes, Mux, IDU & ODU shall include but not be limited to weight, dimensions and size.
- 1.13 Each Party shall be responsible for all workmanship cost relating to installation and laying of equipment and links on its side of the POI.

- 1.14 Each Party shall be responsible for Fault management of all its own equipment and links on its side of the POI at its own cost.
- 1.15 Subject to Clause 8 of the main body, Attachment C3 and Attachment C4 may be amended by PMCL by notice to the Operator.

## Schedule C2 - SMS Interconnection

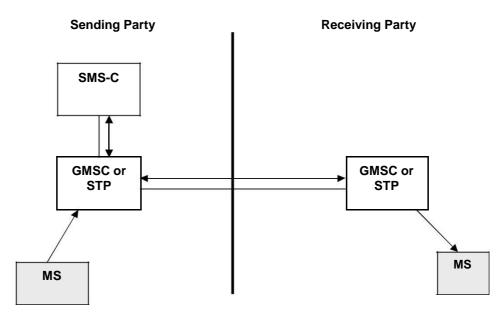
#### 1. General

The provisions of this Schedule shall apply if the Short Message Conveyance Service is provided by the Operator who requests to Interconnect with PMCL for termination of such traffic onto PMCL Network.

PMCL and the Operator shall connect and maintain the connection of their Networks to each other for the purpose of sending and receiving Short Messages. Each Party on initiation of Short Message into its Network that is destined to the other Party's Network shall duly convey such Short Message to the other Party's Network.

The Parties shall send information regarding their respective SMS-Cs for Short Messages to the other.

Routing of Short Message traffic shall be through GMSC or STP in the PMCL Network as explained in the diagram below:



——— MAP Signaling

Only the number series allowed and agreed upon between the Parties for voice communication between normal subscribers shall be defined in the SMS-C platforms.

## Schedule C3- Interconnect Ordering

### 1. Forecasting

- 1.1 Each Party ("Forecasting Party") shall provide to the other Party ("Notified Party") a forecast of all Interconnect capacity in terms of E1 and traffic intended to be terminated in terms of Erlangs onto the other Party's Network for a period of two (2) years (the "Forecast Period") commencing, in the case of the first forecast on the Commissioning Date and thereafter in terms of Clause 1.2 hereof. Such forecast shall include forecasts of capacity and traffic for each half of the first year of the Forecast Period and annual forecast of capacity and traffic for the next year of the Forecast Period. The forecasts shall be provided in terms of Attachment C1. The Parties may amend the form of Attachment C1 to take into account Services not reflected in Attachment C1.
- 1.2 The first forecast shall be supplied at least sixty (60) Calendar Days before the requested Commissioning Date and thereafter on each 1st October, covering the Forecast Period starting 1st January of the year following the forecast date, and 1st April, covering the Forecast Period starting 1st July of the year following the forecast date. All traffic forecasts shall be in terms of Busy Hour Call Attempts and Busy Hour Erlangs, stating the busy hour. For these forecasts, time consistent busy hour of the exchange and routes shall be determined.
- 1.3 The Interconnect Capacity for the purpose of forecast shall be calculated as follows:

No. of E1s = [Erlangs / (0.7 x 0.3)] {Rounded up to zero decimal places}

- 1.4 The Forecasting Party must provide all Forecasts in good faith and use all reasonable endeavors to ensure that Forecasts are accurate.
- 1.5 The Forecasts shall be used for planning purpose only and the Notified Party shall not be obliged to provide any service to the other Party unless the other Party has placed confirmed order for that particular service.

#### 2. Ordering

A Party ("Requesting Party") shall submit a formal request ("Capacity Order") in terms of Attachment C2, for Interconnect Capacity ("Ordered Capacity") to the other Party ("Supplying Party"). The Supplying Party shall make reasonable endeavours to provide such Interconnect Capacity provided there are no outstanding dues against the Requesting Party.

## 3. Delivery and Utilization

- 3.1 Subject to fulfilment by Operator of the provisions of **Clause 20** of the main body of this Agreement, the Supplying Party will respond to a Capacity Order as soon as possible but not later than fifteen (15) Business Days of receipt of such Capacity Order. The response shall be either:
  - (a) an acknowledgment that the Supplying Party is able to provide the Ordered Capacity by a particular date ("Ordered Delivery Date"). The Ordered Capacity shall be provided as soon as possible but not later than fort-five (45) Calendar Days from the date of Capacity Order from the Requesting Party; or
  - (b) an advice that the Supplying Party is unable to provide the Ordered Capacity as procurement is required.
- 3.2 Where procurement is required in order to meet the Capacity Order, and where the Supplying Party advises the Requesting Party pursuant to **Clause 3.1 (b)**, the Supplying Party shall seek confirmation of the Order from the Requesting Party. Upon confirmation by the Requesting Party, the Supplying Party shall complete the procurement not later than it would complete such procurement for itself and shall provide the Ordered Interconnect Capacity to the Ordering Party as soon as possible but not later than a period of ninety (90) Calendar Days from the date of Capacity Order from the Requesting Party.
- 3.3 If the Requesting Party seeks Interconnect Capacity at a level higher than the Ordered level or on a Order Delivery Date other than the agreed Order Delivery Date, it may make a request to the Supplying Party to provide the revised level of capacity or revise the Order Delivery Date. Where necessary, the Supplying Party will undertake and complete a feasibility study within thirty (30) Business Days.
- 3.4 Each Party shall use its reasonable endeavours to ensure that its Network Equipment on its side of the relevant POI are provisioned by the Commissioning Date and maintained in accordance with the Ordered Capacity under this **Schedule C2**.
- 3.5 The Supplying Party reserves the right to reduce the number of E1s as given to the Requesting Party by the number of E1s so as to bring the utilization to the level not exceeding 60% of capacity, in case the capacity is utilized by less than forty (40) percent for a consecutive period of three (3) months.
- 3.6 In case the Requesting Party is unable to deliver any traffic within the first quarter after the Commissioning Date, the Supplying Party may withdraw the Capacity provided under this Agreement after giving fifteen (15) Calendar Days written notice to the Requesting Party.

## **Schedule C4-Testing**

#### 1. General

- 1.1 The purpose of the Interconnect testing is to provide reassurance that each Party's Network can inter-work correctly with the other Party's Network and that the Interconnection shall not adversely affect the existing services provided by a Party to its Customers.
- 1.2 Interconnection shall be carried out and Services shall be provisioned under this Interconnection Agreement only after both the Parties are satisfied with the Interconnect testing results in accordance with this Schedule.
- 1.3 Interconnect testing shall be carried out in accordance with PMCL's testing procedures as prescribed from time to time or testing procedures otherwise mutually agreed by the Parties. The Parties shall perform Interconnect Testing in accordance with this Annex or as otherwise agreed by the Parties.
- 1.4 The testing schedule and period shall be set-up with the mutual consent and agreement of the Parties.
- 1.5 The Parties shall act in good faith and make reasonable endeavours to complete all test activities within the agreed testing period.
- 1.6 Neither Party shall be liable to the other Party for any delay in completing all the test items unless such delays is directly attributable to the neglect or fault of such Party.
- 1.7 All Interconnect testing shall generally be carried out during Business Days and in accordance with the mutual convenience of the Parties.
- 1.8 Connection of the Operator Network to PMCL's designated IGS and of PMCL Network to Operator's designated IGS (as the case may be) shall be carried out only upon satisfactory completion of the Interconnect testing in accordance with testing procedures as agreed between the Parties.
- In the event that a Party identifies a Critical Problem attributable to the other Party the other Party shall ensure that such problem is resolved within the testing period. Otherwise, a new testing schedule shall be set-up to verify the Critical Problem(s) when solutions are available. "Critical Problem" refers to a problem affecting the conveyance of Calls between the PMCL Network and the Operator Network including, but not limited to, problems that result from deviations by the Party from the specifications that it provided to the Other Party.
- 1.10 The Parties shall adhere to the testing schedule and duration as agreed. Any request for cancellation of Interconnect testing shall be made in writing.

#### 2. Interconnection Link Testing

- 2.1 Each Party shall ensure that proper end to end connectivity has taken place using test equipment used for this purpose for example BERT Tester.
- 2.2 After establishing connection between the IGS of the Parties, the Parties shall confirm this connectivity by loop and break test.
- 2.3 Each Party shall ensure that Circuit Identity Code(s) ("CIC") is properly defined in IGS.
- 2.4 The Parties shall ensure that all the devices except signalling and synchronization devices are in idle state after definition of CIC(s).
- 2.5 The Parties shall ensure that by blocking E1 channels in one IGS, other corresponding IGS E1 channels are blocked automatically.
- 2.6 The Parties shall ensure that the number of signalling links is defined in terms of forecast agreed in accordance with **Schedule C3**.
- 2.7 The Parties shall ensure that there is no alarm on signalling links after de blocking.

#### 3. Billing Testing

3.1 Each Party shall provide the other Party testing configuration, test numbers, the preferred testing timeframe and the names of the designated persons to perform billing testing in the form set out as **Attachment C5** and numbering series in the form set out as

#### Attachment C6.

- 3.2 Each Party shall ensure that testing includes Calls on maximum numbering levels in different time slabs of different duration.
- 3.3 Testing process shall include but not limited to the following:
  - a. Calls shall be made on maximum possible numbering levels of the other Party. However, the Calls must be made to at least one numbering level for each city, for prepaid as well as postpaid numbers. Further, at least one Call should be made from each Interconnection Site. The duration of Calls should vary between 5 seconds to more than a minute.
  - Calls shall be made to any one of the numbering levels in all time slabs, at least once.
     The duration of Calls should vary between 5 seconds to more than a minute.
  - c. Calls shall be made to at least one numbering level of the other Party in such a way that the Call progresses at least one minute into the second time slab while starting in an earlier time slab. The duration of the Call in the first time slab shall also be more than a minute.
- 3.5 Each Party making Calls to other Party's Network, shall exchange information with the other Party, to verify the results, in the form set out as **Attachment C7**.
- 3.6 The Party receiving the above information shall compare the test results received from the other Party with the CDRs generated by its own system and certify the results.
- 3.7 If the test results are verified to the satisfaction of both the Parties they shall sign the "Certificate of Billing Conformance" set out as Attachment C7.
- 3.8 On declaration of testing being successful, the Parties shall exchange signed copies of the test sheets for the test cases.

# PMCL – Reference Interconnect Offer

- 3.9 If any Party disagrees with the results of any Call testing it may ask the other Party to redo the testing specifying the reasons for non-conformance of testing results. This exercise shall be carried out till such time the testing is declared successful by both the Parties.
- 3.10 No Party shall allow the other Party to use its Network for commercial purposes without signing of "Certificate of Billing Conformance", by both Parties, even if the Interconnection Agreement has become effective.
- 3.11 Subject to provisions of **Clause 8** of the main body of the Interconnection Agreement, the billing testing shall also be carried out where any Network Alteration or Data Management Amendment takes place.

## Schedule C 5 - Calling Line Identification (CLI)

- The Parties agree that Calling Line Identification ("CLI") shall be passed between the Parties'
  Networks for all Calls and Short Messages or Multimedia Message (if applicable) for which
  the Services are provided, subject to CLI being forwarded to a Party from another network
  with which its Network is connected.
- 2. If a Party's Network requests CLI from the other Party's Network, the originating Network shall generate and convey CLI to the first Party's Network to the extent that the originating Network has such a capability.
- 3. Subject to **Clause 16**, a Party whose Network receives CLI following a request pursuant to **Clause 2** shall only use the CLI for the following purposes:
  - (a) routing Calls;
  - (b) compilation of inter Party bills;
  - (c) agreed administrative use in accordance with accepted industry practice from time to time which includes, at the date of this Interconnection Agreement, Call trace, malicious Call identification, compilation of statistics relating to Call origin and fraud prevention and detection;
  - (d) display to Customers; and
  - (e) as otherwise required by law.
- 4. Notwithstanding other provisions of this Interconnection Agreement, a Party may use CLI to pass telephone numbers to Emergency Organisations.
- The cost of generating and conveying CLI is included in the relevant conveyance rates for Calls or Short Messages or Multimedia Message (if applicable). Neither Party shall apply additional charges for CLI.
- 6. If there is a change in applicable law or regulation materially affecting the operation of CLI, the Parties shall change the operation of CLI to the extent necessary to comply with the applicable law or regulation.
- 7. The Parties shall bar CLI in accordance with the CLI presentation and restrictions fields (CLIP/CLIR) within the signalling\_message.
- 8. Each Party shall resolve any service issues arising from the provision of CLI from the other Party's Network where it is not the Calling Party's actual directory number. A list of such nonsubscriber CLI (Dummy CLI) shall be notified by each Party to the other Party in writing whenever they are already in use or are planned for use.
- 9. Both Parties shall be allowed to present CLI to their Customers subject to the CLIP/CLIR fields. The Parties shall not disclose, either at the Called Party's terminal or to the Called Party, the telephone number of a Calling Party who has subscribed for CLIR.

- 10. For Calls for which CLI is not available, such as Calls from customer service operator positions, the category of the Calling Party shall be clearly indicated in the signalling message.
- 11. No Party shall manipulate the CLI of the original Calling Party and the original Calling Party CLI shall be passed on in the conveyance of a Call accordingly.
- 12. Each Party shall not, in the handling of outgoing traffic, manipulate the access number dialled by the Calling Party
- 13. Each Party shall set the A-bit of the Forward Call Indicator (FCI) of the Initial Address Message (IAM) on the ITU-T Signalling System No.7 ISDN User Part (ISUP) to the value 1 to identify an incoming International Call.
- 14. Where the Call originates from outside Pakistan, the Operator should present CLI to PMCL where it is commercially available from the originating network.
- 15. The provision of CLI for presentation purposes shall be subject to such restrictions and arrangements as may be established between the Parties from time to time. Any arrangements which the Parties make with regard to CLI shall be subject to any obligation or condition under either Party's license or any statutory or legal obligation or restriction with regard to confidentiality or otherwise, and any other applicable laws and regulations. Each Party shall comply with the reasonable requests of the other made for the purposes of complying with the applicable laws and regulations
- 16. A Party conveying Calls handed over from a Third Party Network shall convey, to the extent received, the CLI associated with those Calls.
- 17. For all incoming International Calls, the identification of the calling party (caller number) should be displayed on the CLI of the called party.
- 18. In case it is not possible to achieve the requirement in Clause 17, the network code from where the Call originated and the carrier selection code of the LDI operator should be displayed on the CLI of the called party.
- 19. If the requirements set out in **Clause 17** and **18** are not achievable, the carrier selection code of the LDI operator should be displayed on the CLI of the called party.
- The Parties shall follow all directives of the Authority relating to CLI, as and when issued.
- 20.21. The Parties shall ensure that the CLI of all Calls and Short Messages or Multimedia Message (if applicable) originated in one Party's network for termination on other Party's network, shall be from the Numbering Plan of originating Party's network.

## Schedule C6 - Standards, Interfaces and Protocols

#### 1. General

1.1 All the traffic terminations on to PMCL Network shall be done in accordance with the Standards and Protocols specified in this Agreement or as otherwise adopted by PMCL in accordance with Clause 7.3 of this Agreement.

#### 2. Microwave

- 2.1 Where microwave systems are required to be used by Operator in terms of the Interconnection Agreement:
- 2.1.1 The Operator shall install SDH microwave systems with a minimum capacity of 2xSTM-1 using its own frequency band at POI at which it is connected.
- 2.1.2 The links shall be established as per the ITU-T standard G.803.
- 2.1.3 The frequency used shall be licensed and approved by the relevant regulatory authorities with all associated fees paid by the Operator.
- 2.1.4 The interface with PMCL equipment shall be at E1 level or at any other level as agreed by the Parties.
- 2.1.5 The Operator shall provide a detailed link engineering plan to PMCL at least fifteen (15) Calendar Days before the actual implementation.
- 2.1.6 All on site cable laying shall be done as specified by PMCL.

#### 3. Optical Fibre

- 3.1 Where optical fibre is required to be used by Operator in terms of the Interconnection Agreement:
- 3.1.1 The Operator shall use its own fibre optic cable en-route to Co-Location Site point of termination with a minimum installed capacity of STM-4.
- 3.1.2 Fibre optical cable routes within the Co-Location Site shall be specified by PMCL.
- 3.1.3 The Operator shall traverse a maximum of four (4) pair Optical Fibre Cable through the duct as provided by PMCL at its Co-Location Site and shall properly terminate in the Optical Fibre Distribution Frame (OFDF) housed in the cabinet installed by the Operator for Interconnection purpose as part of Interconnection Equipment at Operator's cost.
- 3.1.4 The Operator shall interface at E1 level with PMCL Network

- 3.1.5 All the necessary multiplexing and de-multiplexing shall be done by the Operator at its own cost.
- 3.1.6 The Operator shall ensure that no safety hazards result due to laser and related optical pulses emanating from the equipment.
- 3.1.7 The Operator shall follow ITU standards G.911, G.957, G.958, G.959.1.

#### 4. Synchronization

- 4.1 PMCL Synch source shall be the Master Ref. Source or Primary Ref. Clock meeting or exceeding ITU-T recommendation G.811.
- 4.2 Operator's Network shall be the slave with Synch quality at least equivalent to ITU-T G.812.
- 4.3 The physical interconnection for synchronization shall be in the form of 2.048 Mbit/s G.703-9 (E1).
- 4.4 The Operator shall arrange all the relevant hardware, cables and connectors for interconnection with PMCL synch source up to the DDF of PMCL synch source.
- 4.5 The cable route shall be indicated by PMCL for physical connection.
- 4.6 PMCL can provide synch source at Interconnection Sites at the designated locations.

#### 5 Signalling requirements and standards

- 5.1 The Interconnection shall be through E1 links (2.048Mbits/sec), and shall comply with ITU-T standards G.703, G.704, and G.706.
- 5.2 The Signalling system to be used is ITU-T Common Channel Signalling System No. 7 (ISUP).

  The use of other signalling protocols may only be used after mutual agreement.

#### 6. Numbering

Each Party shall comply with ITU-T Standard E.164 and the Numbering Plan.

Each Party shall submit its numbering series as approved by the Authority to the other Party in the format as set out in **Attachment C6**. Each such request shall be serially numbered by the Party submitting such request for maintaining data integrity.

## 7. Environmental requirements for Co-Location Equipment

All equipment provided by the Operator within Co-Located Sites shall comply with the

7.1 environmental requirements as provided by

environmental requirements as provided by PMCL to Operator.

#### 8. Power Requirements

8.1 All electrical equipment shall comply with EN60950 or IEC 950.

- 8.2 Requirements for the Operator's equipment to Operate on 48 V DC Sources are as follows:
  - a) The equipment shall operate from a no-break 48V battery supply, with the positive pole earthed. The earth bus shall be directly connected to the battery pole.
  - b) The guaranteed performance of the equipment shall be maintained for variations of the supply as defined in ETS 300 132-2.
  - c) The equipment shall make provision for reverse polarity protection.
- 8.3 Requirements for the Operator's equipment to Operate on 220 V AC Sources are as follows:
  - a) The guaranteed performance of the equipment shall be maintained for variations of the supply as defined in ETS 300 132-1.
  - b) The Operator shall state the power consumption of the equipment in the idle (no-traffic) state. The maximum power consumption shall also be stated.
  - c) The Operator shall state the ability of the proposed equipment to operate from power supply sources other than the ones stated above. Where optional converters or inverters are offered to cover other primary power supply sources, the additional power consumption that is attributed to these devices shall also be stated.
- 8.4 Power System Earthing of the OLO shall be earthed in accordance with TSP 2547 Issue 1 and all the references mentioned therein.
- 8.5 Safety requirements to be met by the Operator are as follows:
  - a) The power system shall be designed and manufactured in a manner that presents the minimum possible safety hazard to operation and maintenance personnel.
  - All conductors shall be adequately insulated to minimize the risk of inadvertent contact by personnel.
  - c) All equipment using AC voltages shall be clearly marked to indicate the various voltage
  - d) All distribution fuses, Main Circuit Boards (MCBs) and protection devices shall be clearly marked to indicate the AC or DC voltage levels being present.
  - e) The equipment design shall allow maintenance and testing of parts, including the replacement of faulty items, without the risk of contact with dangerous high voltages.
  - f) Cables shall be adequately shielded and protected to minimise\_minimize\_mechanical damage to the conductors or the insulation.
  - g) All exposed metal parts, cabinets, cable trays, cable ladders etc. shall be bonded to the building earth for the protection of the operation and maintenance personnel.
  - h) All DC power cables and bus-bars shall be identified at the point of termination by colour coding or polarity marking/identification:

Positive conductor Red.

Negative conductor Blue.

- i) All cabling for multiple AC and/or DC system voltages shall be clearly segregated and terminated. System voltages shall be clearly labelled in English.
- j) UPS systems employing a high voltage battery greater than 200 VDC, shall be securely constructed to prevent accidental contact with the battery.

#### 9. Miscellaneous

All wire and cable insulation shall be of plastic type. The material used shall be of ozone resistance quality and shall not deteriorate in the specified environment.

No materials shall be used which shall produce gases having harmful effect on personnel or equipment. As far as possible the plastic material shall not sustain fire.

- 9.3 The equipment shall not contain any substances which are harmful to health, or which might exude harmful components in the course of time.
- 9.4 If it shall be unavoidable to use elements that could cause danger to personnel or the environment if not used in their designed manner these shall be specified indicating the risk and shall be clearly marked near to the component concerned. Such components shall only be installed following the approval of PMCL.
- 9.5 No repair or modification shall be made on the Printed Circuit Boards (PCB), either in the manufacturing or in installation phases. No prototype PCB shall be acceptable.
- 9.6 Materials, which are chemically or electro-mechanically incompatible, shall not be used where there is the possibility of interaction.
- 9.7 In order to minimize service restoration time in the event of a fault, the Operator is required to carry sufficient stock of appropriate consumables, including but not limited to fuses.
- 9.8 Only proprietary components shall be used and no component shall be operated at or above the manufacturer's rated maximum value.
- 9.9 Organic materials liable to attack by fungus or mould shall be avoided. If their use is unavoidable, they shall be suitably treated.
- 9.10 When one component with similar specifications replaces any component, the equipment shall still meet its specified original performance. PMCL shall be duly informed of any such replacement and modifications.

#### Schedule C7 – Maintenance and Fault Management

#### 1. Fault Reporting

- 1.1 Each Party shall maintain its own fault reporting point ("Fault Contact Point") which shall be responsible for handling the faults between Networks, coordinating the fault clearance (including escalations) within its own Network and subsequently reporting the clearance of the fault to the other Party. Fault Contact Points shall be notified to each other in terms of Attachment C8 as an obligation. The Fault Contact Points shall remain available for twenty-four (24) hours.
- 1.2 In case a fault related to Interconnection is observed by any one of the Parties, such Party is obliged to inform the Fault Contact Point of the other Party as soon as is reasonably practical by phone followed by a fax/email in the form set out in **Attachment C9**, which shall also be copied to the Nominated Representative of the other Party.
- 1.3 The Parties shall co-operate in good faith during troubleshooting and follow up actions, and keep each other informed on the status of the progress of the fault clearance in a timely manner.
- 1.4 Prior to activating the fault handling procedures, the Party reporting the fault ("Reporting Party") must reasonably establish that a genuine fault exists and also that every effort has been made to prove that the fault is not within the Reporting Party's side of the POI.

#### 2. Fault Handling

- 2.1 The Fault Contact Point of the Party to whom the fault is reported ("Reported Party") shall immediately report the occurrence of such fault to the operation and maintenance in-charge of the Reported Party.
- 2.2 The Parties shall take immediate steps to rectify the problems. This includes but is not limited to arranging any replacement equipment or its parts thereof.
- 2.3 The Parties shall maintain the communication links at the affected site(s) and report on the progress of the restoration work.
- 2.4 The engineering teams deputed from both the sides shall try to rectify the fault to the best of their abilities and available resources.
- 2.5 The engineering teams shall keep their immediate supervisors informed about the progress.
- 2.6 Where a fault persists, and Party considers that progress of the remedy is not satisfactory such Party may require that the fault rectification be escalated to a higher level consisting of immediate supervisors of the Fault Contact Points.
- 2.7 Failure to rectify a fault within fifteen (15) Calendar Days after escalation in terms of Clause2.6 above shall entitle either Party to require the matter to be placed before the chief technical officers (or equivalent) of the Parties for resolution by them as soon as possible.

2.8 Each Party shall ensure that sufficient stock of spare parts and back up equipment is maintained in accordance with good industry practice to ensure efficient fault handling and rectification.

#### 3. Planned Engineering Works

- 3.1 Each Party shall inform the other Party for any planned engineering works within its Network, which shall result in outage of service, by letter, or fax communicated to the Fault Contact Point of the other Party, with a copy to the Nominated Representative of the other Party.
- 3.2 Each Party shall inform the other Party in writing at least fifteen (15) Calendar Days before the planned engineering work. The details of the works to be carried out shall be provided on the form set out as in **Attachment C10**. The schedule and duration of the planned work proposed by one Party shall be agreed in good faith by the other before the commencement of such works. Each Party shall keep the other informed in a timely manner as to the progress of any engineering work.
- 3.3 On completion of work, each Party shall notify the other Party through Call, fax and or letter addressed to the Fault Contact Point of the other Party with a copy to the Nominated Representative of the other Party.

# Schedule C8 – Co-location Site Ordering, Maintenance and Access Procedure

#### 1. Ordering and Provisioning Procedure

- 1.1 The Operator shall submit its request for Co-location Space at Co-Location Site(s) listed in Attachment C3, filling out and delivering to PMCL a Co-Location Request Form set out in Attachment C11.
- 1.2 PMCL shall acknowledge receipt of the Co-Location Request Form and indicate whether the Co-Location Request is accepted on a non-binding basis or rejected. If the Co-Location Request is rejected, PMCL shall provide written reasons for such rejection to the Operator.
- 1.3 PMCL may reject a Co-Location Request if:
  - (a) the Operator is not a licensed LL Operator, LDI Operator or CMO; or
  - (b) the Co-Location Request is not in the prescribed Co-Location Request Form; or
  - (c) the Co-Location Request does not contain the required information; or
  - (d) there is no available space at the PMCL Co-Location Site as determined in accordance with Clause 12 of the Main Body of the Interconnection Agreement.
- 1.4 In case of acceptance, the installation of Interconnect Equipment shall take place in accordance with the procedure set out in **Clause 2** of this **Schedule C8**.

- 1.5 The Operator acknowledges that the Co-Location Space allocated and the actual placement of the Interconnect Equipment shall be determined by PMCL. PMCL is not obligated to place all of an Operator's Interconnect Equipment together or additional Operator Interconnect Equipment adjacent to existing Operator Interconnect Equipment, provided that PMCL shall use its reasonable endeavours\_to accommodate any reasonable request for adjacent placement made by the Operator.
- 1.6 Subject to Clause 12 of the main body of the Interconnection Agreement and Schedules B3 and C8, PMCL shall provide:
  - space for placement of Interconnect Equipment, indoor and outdoor cabling at Operator's cost to the Operator at Co-Location Sites without any liabilities against PMCL at Co-Location Sites;
  - (b) 24 hour manned building security;
  - (c) physical access to the nominated and authorized personnel of the Operator to Co-Location Site(s) in accordance with the Co-Location Site Access Procedures described in **Schedule C8**.
- 1.7 Unless otherwise agreed and subject to Clause 2.1 of Schedule B3 the Operator shall pay for Co-Location Space on quarterly basis in advance on the Charges as set out in Annex D.
- 2. Co-Location Equipment Installation and Maintenance Procedures
- 2.1 The Operator shall install the Interconnect Equipment (listed in the form set out in **Attachment C12** and provided to PMCL along with the Co-Location Request) at the Co-Location Site in accordance with the terms set out herein.
- 2.2 Prior to commencing installation of its Interconnect Equipment, the Operator must submit to PMCL for approval detailed installation plans and installation timetable no less than twentyone (21) Business Days before the proposed commencement of installation. The Operator shall not commence installation of its Interconnect Equipment until it has received PMCL's written approval.
- 2.3 Operator must comply with PMCL's procedures for Co-Location Space in relation to the installation, operation and maintenance of its Interconnect Equipment located in the Co-Location Site as issued and amended from time to time by PMCL, and any written instructions, which are provided to the Operator by PMCL.
- 2.4 The Operator must ensure that the floor loading of its Interconnect Equipment shall be limited to the maximum specified.
- 2.5 The Operator must install its Interconnect Equipment in the Co-Location Space within thirty (30) Business Days after PMCL's approval. If the Operator's failure to complete installation is attributable to circumstances beyond the Operator's reasonable control, PMCL shall grant a

reasonable extension of time for installation to the Operator at the Operator's request. The Operator's request under this clause must describe the circumstances beyond the Operator's control and such request must be received prior to the expiry of the aforementioned thirty (30) Business Day period. Failure to install within that period or any extension such period granted by PMCL shall be deemed to be a withdrawal of the Operator's request for Co-location Space.

- 2.6 The Operator must not locate equipment other than agreed Interconnect Equipment in the Co-Location Space.
- 2.7 PMCL shall provide to the Operator the communication earth and AC power as well as generator back-up Power Distribution Point for the Operator's Interconnect Equipment.
- 2.8 PMCL shall provide both AC and generator backup power for the Operator's Interconnect Equipment.
- 2.9 The Operator shall maintain its own DC backup batteries within its allocated footprint, in accordance with the equipment manufacturers' specifications.
- 2.10 Operator shall ensure that its Interconnect Equipment does not cause any interference to PMCL's equipment, plant, facilities, Networks and the equipment of other occupying Third Party operators in the Co-Location Site, including when installing equipment. In the event of any interference, the Parties shall in good faith take reasonable measures to resolve the problem promptly. Where the Operator's equipment is causing interference to existing equipment and the interference cannot be resolved, the Operator shall remove the source of interference immediately.
- 2.11 If PMCL determines that the interference poses an immediate risk of personal injury or significant property damage, it may withdraw permission for physical access to the Co-Location Site and at the Operator's cost, take measures necessary to prevent such injury or damage. In circumstances other than those set out in the previous sentence, PMCL may provide the Operator with five (5) Business Days notice to rectify the interference. If the interference continues after such time, PMCL may withdraw permission for physical access to the Co-Location Site and at the Operator's cost, take measures to prevent the interference.
- 2.12 The Operator shall remove daily any rubbish/debris created in the course of installation.
- 2.13 The Operator shall consult with and obtain the consent of PMCL before carrying out any construction work on the floor, wall and ceiling slabs.
- 2.14 The Operator shall obtain prior approval from PMCL for Hot Work and perform any such works in accordance with safety procedures. "Hot Work" means any work involving riveting, welding, flame cutting, burning, gouging or any other work involving the use of heat for producing sparks.
- 2.15 No work shall be performed by the Operator on any of PMCL's equipment, facilities, plant or Networks including, but not limited to earth bars and Power Distribution Points/boards.

PMCL's staff shall carry out all the connection of the Operator's Interconnect Equipment to PMCL's earth bars and Power Distribution Points/boards within fifteen (15) Calendar Days of the request by the Operator.

- 2.16 The Operator, during and after installation, shall not use any flammable or hazardous materials, whether on a permanent or temporary basis. No smoking is allowed in the Co-Location Site. No food or drinks are allowed in the Co-Location Site and the Operator shall ensure that its employees and contractors involved in installation or maintenance strictly abide by these prohibitions.
- 2.17 Where, during the course of installation, operation, maintenance, replacement or repair of its Interconnect Equipment the Operator causes any damage to PMCL's Co-Location Site, plant, Network, Equipment or facilities, or any plant, Equipment or facilities of a Third Party at the Co-Location Site, the Operator must report the damage immediately to PMCL. PMCL shall rectify any damage in any way it deems fit, the cost and expense in relation to the damage including for the repair or replacement thereof shall be borne by the Operator.
- 2.18 The Operator shall report immediately any incident, injury, harm, fatal or otherwise that occurs at the Co-Location Site to PMCL. For fatal or serious accidents, the accident site shall be left undisturbed to facilitate the relevant authority to investigate the circumstance leading to the accident. The Operator shall report immediately to police and insurance company of any fatal accident having occurred at the Co-Location Site.
- 2.19 Notwithstanding anything to the contrary in this Interconnect Agreement the Operator shall be liable for and shall indemnify and keep indemnified PMCL against all losses, claims, proceedings, damages, liabilities, costs and expenses for injuries or death to any person whomsoever or any loss or damage to any property whatsoever which arise out of or in consequence of any act or omission of the Operator's employees, agents, consultants and contractors in relation to the Co-Location Site and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof.
- 2.20 Upon completion of the installation of the Interconnect Equipment in the Co- Location Space, the Operator shall advise PMCL and request PMCL to conduct a final inspection and confirm that the installation conforms to the approved detailed installation plans.
- 2.21 If the installation does not materially conform to the approved detailed installation plans, PMCL shall notify the Operator in writing stating such non-conformity. The Operator must reinstall or take other appropriate corrective action within ten (10) Business Days of notification, or such other time as is otherwise agreed. The Operator shall bear the reasonable costs that PMCL incurs for the inspection of the reinstallation or other appropriate corrective action. PMCL may still inform and require the Operator to make adjustments to its

- installation where the installation does not conform to the installation plan in a non-material way, but this notification shall not delay the approval process under this Schedule.
- 2.22 If the Operator fails to reinstall or take the appropriate corrective action, referred to in Clause
  2.21 PMCL may take appropriate corrective action including removal of the Operator's Interconnect Equipment. The reasonable costs for the corrective action shall be borne by the Operator.
- 2.23 The Operator shall be responsible for the operation and maintenance of its Interconnect Equipment.
- 2.24 In the operation and maintenance of the Interconnect Equipment, the Operator must:
  - (a) take such other action as a reasonably prudent operator would; and
  - (b) keep the Co-Location Space in a tidy and safe condition at all times; and
  - (c) ensure that flammable or toxic material is not left in or around the Co-Location Space following maintenance or other operations.
- 2.25 If a fault, defect or problem with the Interconnect Equipment of the Operator causes or may cause damage to the Co-Location Space or PMCL's facilities, the Operator must:
  - (a) notify PMCL as soon as practicable; and
  - (b) repair the fault, defect or problem or take other appropriate corrective action immediately.
- 2.26 Where PMCL determines that the Operator's Interconnect Equipment poses an immediate risk of personal injury or significant property damage, it may, at the Operator's cost, take interim measures necessary to prevent such injury or damage, pending attendance by the Operator to perform corrective work.
- 2.27 If the Operator detects a fault, defect or problem in a Co-Location Space, it must notify PMCL as soon as possible.
- 2.28 The Operator must ensure that its employees, agents and approved subcontractors comply with the provisions hereof including all reasonable procedures and directions of PMCL as notified from time to time.
- 2.29 The Operator must comply with all laws, standards, authorizations and applicable requirements when performing works.
- 2.30 The Operator must ensure that it has all necessary permits, approvals and authorisations from any person, governmental, regulatory or relevant authority in order to perform works. Where requested to do so, PMCL shall reasonably assist the Operator to obtain any such necessary permit, approval.

- 2.31 The Operator shall have no right, title or proprietary interest (including but not limited to a leasehold interest or tenancy right) in the Co-Location Site.
- 2.32 The Co-Location Equipment must be marked by the Operator to clearly indicate that it is owned by the Operator and in such manner as PMCL may reasonably direct from time to time.
- 2.33 In relation to physical access to the Co-Location Space, the Operator shall comply with PMCL's physical access procedures set out in **Clause 4** hereof as amended from time to time by PMCL and any written instructions, which are provided to the Operator by PMCL.

#### 3. Termination of Co-Location Space

- 3.1 The permission by PMCL regarding location of Operator's Interconnect Equipment at a Co-Location Space to be provided by PMCL under this Schedule shall commence on the date PMCL gives its approval to the Operator to install Interconnect Equipment unless terminated earlier in accordance with this Schedule.
- 3.2 Subject to Clause 3.5 of this Schedule PMCL may terminate the permission for use of Co-Location Space at any time with immediate effect by giving notice to the Operator if the Operator fails to complete the installation of its Co-Location Equipment within thirty (30) Business Days of the approval by PMCL or such other extended period as agreed by the Parties.
- 3.3 Without prejudice to the other clauses hereof and in the Interconnection Agreement, PMCL may terminate the permission for use of Co-Location Space under this Schedule by giving Operator no less than six (6) months written notice. Termination of the permission to use Co-Location Space shall take effect from the date specified in the notice.
- 3.4 PMCL (the "Terminating Party") may immediately terminate the permission for use of Co-Location Space at a Co-Location Site if the Operator is in breach of any clause of this Schedule and Schedule B3 and such breach remains un-remedied for a period of ten (10) Business Days after receiving written notice from the Terminating Party to do so.
- 3.5 PMCL may immediately terminate permission of Co-Location Space at a Co-Location Site if:
  - (a) the Operator is no longer an LL Operator, LDI Operator and/or CMO
  - (b) in PMCL's reasonable opinion, the Operator is using the Co-Location Space in contravention of an applicable law, license, regulation or direction and PMCL has the necessary confirmation from the relevant Governmental Agencies that the Operator is in contravention of the applicable law, license, regulation or direction;
  - (c) the use of Co-Location Space by Operator causes or is likely to cause physical or technical harm to the PMCL Network or to the Co-Location Site including but not limited to causing damage, interfering with or causing deterioration in the operation of the PMCL Network;
  - (d) the Interconnect Equipment is used for a purpose other than for Interconnection of the Operator's Network to the PMCL Network;
  - (e) the Operator removes or abandons its Interconnect Equipment, except where the Operator gives fifteen (15) Business Days written notice.

- (f) the Operator locates equipment other than Interconnect Equipment in the Co-Location Space;
- (g) the Co-Location Space has become unsafe or unsuitable for its purpose; or
- (h) PMCL's right to own, maintain or operate the Co-Location Site is revoked or terminates or expires.
- 3.6 PMCL shall give the Operator no less than six (6) months' notice at any time that the permission for use of Co-Location Space is to be terminated because of the closure of that Co-Location Site. The Operator shall bear its own cost associated with the closure of a Co-Location Site. If the Operator requests, within thirty (30) Calendar Days after receiving a notice under this clause, alternative solutions from PMCL, PMCL may offer alternative interconnection solutions to the Operator. Such alternative Interconnection solutions offered should, to the extent feasible, be comparable in terms of functionality and if accepted by the Operator within fifteen (15) Calendar Days from the date of the offer, permit implementation of the alternative interconnection solutions. Nothing in this clause prevents PMCL from terminating the permission for use of a Co-Location Space at the end of the six (6) month period provided that PMCL has complied with this Clause 3.6.
- 3.7 Upon expiry or termination of the permission for use of Co-Location Space:
  - (a) the Operator must discontinue the use of its Interconnect Equipment and remove its Interconnect Equipment from the Co-Location Site within thirty (30) Business Days from the date of termination of the permission for the Co-Location Space; and
  - (b) PMCL shall reinstate the Co-Location Space and recover/reinstate all cables/supports/opening and recover the reasonable cost of such reinstatement from the Operator.
- 3.8 If the Operator fails to discontinue the use of its Interconnect Equipment and remove its Interconnect Equipment under Clause 3.7, PMCL shall remove the Operator's Interconnect Equipment and reinstate the Co-Location Site to its original condition. The Operator shall pay to PMCL all reasonable costs associated with the work undertaken by PMCL including the disposal of the Interconnect Equipment. In such event, the Operator shall have no claim whatsoever, against PMCL.
- 3.9 Upon termination of the permission for use of Co-Location Space, any permission for physical access granted to the Co-Location Site shall also be terminated unless the Operator requires access to remove its Interconnect Equipment.

### 4. Access Procedures

- 4.1 Access to Co-Location Site by the Operator for any purpose shall be governed by following provisions.
- 4.2 Only those individuals whose names have been notified by the Operator to PMCL and who shall have been authorized in this behalf by PMCL shall be allowed access in a Co-Location Site. To that effect, the Operator shall submit to PMCL's Nominated Representative a list of persons nominated as set out in Attachment C13.

- 4.3 Interconnection Sites are monitored by PMCL staff and may be accessed 24 hours a day, 7 days a week.
- 4.4 Access shall only be granted to the room where the Operator's Equipment Co-Location Space is located, escorted by PMCL staff where considered necessary by PMCL.
- 4.5 The Operator shall inform PMCL, by written notice, of any change to the list of authorized persons. The Operator shall remain responsible for the acts or omissions of any such person entering the Interconnection Site.
- 4.6 The Operator shall request physical access to Co-Location Space using the form set out in Attachment C14. PMCL shall authorize the Operator's access to the Co-Location Space on the same form. Only Operator's personnel authorized in terms of Clause 4.2 above shall have access to the Co-Location Space.
- 4.7 Any individual of the Operator requiring access shall present National Identity Card or Passport (if such individual is not a Pakistani national) at the entrance of the Co-Location Site. Access to the Co-Location Site shall be granted upon verification that the name of the individual is recorded on the list of authorized persons, and upon signature by such individual in the logbook. The time of arrival and purpose of such visit shall be noted in the log book by such individual. On leaving the Co-Location Site, the individual shall note the time of departure in the log book.
- 4.8 It is the responsibility of each individual entering Interconnection Sites to ensure that they work in a safe environment. The Operator shall ensure that all persons entering the PMCL Interconnection Sites on its behalf have adequate training for working on equipment Co-Located at PMCL's Interconnection Sites, and that these persons comply with all safety and security requirements applicable to such Interconnection Sites.
- 4.9 All questions and comments regarding safety and security in Interconnection Sites shall be addressed in writing to the PMCL Nominated Representative.
- 4.10 All persons entering Interconnection Sites on behalf of the Operator shall be allowed to make reasonable use of essential facilities, such as power, lighting, water and toilets.

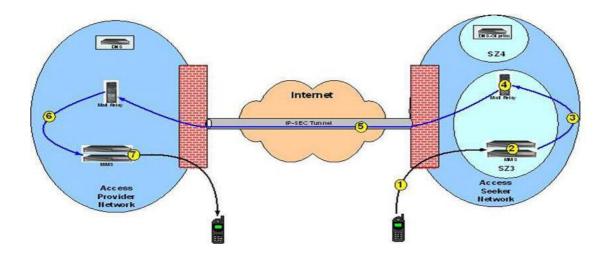
#### Schedule C9 - MMS Interconnection

- The Parties shall connect and maintain the connection of their MMS Networks to each other for the purpose of sending and receiving MMS Messages between the MMS Networks. Each Party as Access Seeker shall duly convey to the other MMS Message originated in its MMS Network by the Messaging Customer destined to the Messaged Customer in the Access Provider's MMS Network and as Access Provider shall convey such MMS Message to a Messaged Customer in its MMS Network.
- 2. A Party shall not be obligated to deliver MMS Messages to the MMS Network of the other Party unless:
  - i) the MMS Link has been established;
  - ii) the Parties have successfully completed any pre-commissioning testing requirements as mutually agreed; and
  - iii) the other Party can similarly deliver MMS Messages to its MMS Network in terms set out herein.
- 3. Each Party agrees to block access of its own Customers to all Multimedia Message Conveyance Service based value added services of the other MMS Network. Only the number series allowed and agreed upon between the Parties for voice communication between subscribers will be defined for Multimedia Message Conveyance Service. For Access Provider to deliver MMS Message to Messaged Customer in its network from Access Seeker's Messaging Customer the Messaging Customer should be within such number series agreed by the Parties.
- 4. The Parties shall exchange the traffic forecast for every Calendar Quarter at least three months prior to the start of the Calendar Quarter provided for network planning purposes.
- 5. The Parties agree that Calling Line Identification ("CLI") shall be passed between the MMS Networks for all MMS Messages.
- 6. The Parties acknowledge that spamming and other unsolicited MMS Messages sent by Customers of the Access Seeker may cause disruptions to the services provided to the Customers of the Access Provider. Each Party agrees to liaise with the other Party in good faith in order to manage and minimize such disruptions where commercially and technically feasible.
- 7. Access Provider shall deliver MMS Messages from Access Seeker's MMSC with equal priority and urgency as those originating from within its own network.
- 8. Access Provider shall retain the MMS Message in its MMSC for a period of at least 2 hours from its receipt and if the MMS Message has not been accessed/retrieved by the Messaged Customer during that time it shall be removed from the MMSC.
- 9. Connectivity for MMS between the MMS Networks of the Parties shall be MM4 type and delivery of messages from Messaging Customer to Messaged Customer between networks shall be handled in accordance with the procedure set out in Clause 11 hereunder.
- 10. Each Party shall bear its own costs of the VPN equipment and internet connectivity, as the nature of the MMS Link requires.

- 11. The delivery of the MMS Message will be handled in accordance with the following process:
  - (a) The Customer of the Access Seeker sends the MMS Message to the Access Seeker-MMS-server.
  - (b) The Access Seeker –MMS server converts the MMS Message to Email
  - (c) The Access Seeker -MMS-server forwards the Email to the Access Seeker -Mail-Relay.
  - (d) The Access Seeker -Mail-Relay routes this mail via an SMTP routing to the Access Provider-mail-relay in the Access Provider network.
  - (e) The mail goes from Access Seeker -mail-relay through the IP-SEC Tunnel to the Access Provider-mail-relay in the Access Provider network.
  - (f) The Access Provider-mail-relay forwards the mail to the Access Provider-MMSC.
  - (g) The Access Provider-MMS-server converts the Email back to an MMS Message, stores the MMS Message and informs the mobile handset of the Messaged Customer.
  - (f) The MMS Message is deleted from the MMS server, immediately on retrieval or after 2 hours, in case it is not retrieved by the Messaged Customer.

#### **MMS Mailing Interconnectivity Solution**

Access Seeker's Customer sends an MMS to Access Provider's Customer.



## **Attachment C1 - Capacity Forecast For Interconnect Links**

|                         |          |    |          |       |    | No. X  |
|-------------------------|----------|----|----------|-------|----|--------|
| Name of the Party       | [        |    |          |       |    |        |
| Type of License         | ]        |    |          |       |    |        |
| License No. Period From | [<br>m [ |    | _] To [_ |       |    |        |
| Particulars             | Unit     |    | Ye       | ear 1 |    | Year 2 |
|                         | •        | Q1 | Q2       | Q3    | Q4 |        |
| Busy Hour Traffic       | Erlangs  |    |          |       |    |        |
| Call Attempts/Hour      | No.      |    |          |       |    |        |
| Volume Traffic/Hour     | Minutes  |    |          |       |    |        |
| E1s*                    | No.      |    |          |       |    |        |
| Busy Hour Traffic       | Erlangs  |    |          |       |    |        |
| Call Attempts/Hour      | No.      |    |          |       |    |        |
| Volume Traffic/Hour     | Minutes  |    |          |       |    |        |
| E1s*                    | No.      |    |          |       |    |        |
| Busy Hour Traffic       | Erlangs  |    |          |       |    |        |
| Call Attempts/Hour      | No.      |    |          |       |    |        |
| Volume Traffic/Hour     | Minutes  |    |          |       |    |        |
| E1s*                    | No.      |    |          |       |    |        |
| Busy Hour Traffic       | Erlangs  |    |          |       |    |        |
| Call Attempts/Hour      | No.      |    |          |       |    |        |
|                         | Minutes  |    |          |       |    |        |
| Volume Traffic/Hour     |          |    |          |       |    |        |

[

Signatures

# Attachment C 2 - Capacity Order

|                  |   | No. |
|------------------|---|-----|
| Name Of Operator | [ | ]   |
| Type Of License  | [ | ]   |
| License No.      | ] | 1   |

| Location | Capacity Required No. of E1s | Reference Forecast No. |
|----------|------------------------------|------------------------|
|          |                              |                        |
|          |                              |                        |
|          |                              |                        |
|          |                              |                        |
|          |                              |                        |
|          |                              |                        |
|          |                              |                        |
|          |                              |                        |
|          |                              |                        |
|          |                              |                        |

# Submitted By

| Name of Authorized Person | ] | ] |
|---------------------------|---|---|
| Designation               | [ | 1 |
| Signatures                | [ | 1 |
| Date                      | 1 | 1 |

# **Attachment C3 – PMCL Interconnection Sites**

| No. | Sites         | Location                               |
|-----|---------------|--|
| 1.  | GMSC          | Islamabad                              |
| 2.  | GMSC          | Faisalabad                             |
| 3.  | GMSC          | Lahore                                 |
| 4.  | GMSC          | Karachi                                |
| 5.  | Media Gateway | Jehlum (subject to activation)         |
| 6.  | Media Gateway | Sahiwal (subject to activation)        |
| 7.  | Media Gateway | Sargodha (subject to activation)       |
| 8.  | Media Gateway | Hyderabad (subject to activation)      |
| 9.  | Media Gateway | Gujranwala (subject to activation)     |
| 10. | Media Gateway | Gujrat (subject to activation)         |
| 11. | Media Gateway | Peshawar (subject to activation)       |
| 12. | Media Gateway | Sialkot (subject to activation)        |
| 13. | Media Gateway | Rahim Yar Khan (subject to activation) |
| 14. | Media Gateway | Multan (subject to activation)         |
| 15. | Media Gateway | Quetta (subject to activation)         |
| 16. | Media Gateway | Sukkur (subject to activation)         |

# **Attachment C4 –Interconnection Sites with Third Party**

| No. | Location Site Address                  |
|-----|--|
| 1.  | Islamabad                              |
| 2.  | Faisalabad                             |
| 3.  | Lahore                                 |
| 4.  | Karachi                                |
| 5.  | Jehlum (subject to activation)         |
| 6.  | Sahiwal (subject to activation)        |
| 7.  | Sargodha (subject to activation)       |
| 8.  | Hyderabad (subject to activation)      |
| 9.  | Gujranwala (subject to activation)     |
| 10. | Gujrat (subject to activation)         |
| 11. | Peshawar (subject to activation)       |
| 12. | Sialkot (subject to activation)        |
| 13. | Rahim Yar Khan (subject to activation) |
| 14. | Multan (subject to activation)         |
| 15. | Quetta (subject to activation)         |
| 16. | Sukkur (subject to activation)         |

# Attachment C5 – Billing Test Team and Information

| Name of Op         | erator              | [         |        | ]          |         |
|--------------------|---------------------|-----------|--------|------------|---------|
| Testing Date       | Э                   | ]         |        | 1          |         |
| Time  1. List of T | from<br>esting Team | [ ] t     | 0 [    | 1          |         |
| Particulars        | 5                   | Islamabad | Lahore | Faisalabad | Karachi |
| Name(s) of         | Contact Person      |           |        |            |         |
| Designatio         | n                   |           |        |            |         |
| Phone No.          | (s)                 |           |        |            |         |
| Mobile Pho         | one No.(s)          |           |        |            |         |
| Fax No.            |                     |           |        |            |         |
| Email              |                     |           |        |            |         |
| Address :          |                     |           |        |            |         |
|                    | est Numbers         |           |        |            |         |
| No.                | Pre-fix             | Number    |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     |           |        |            |         |
| 3. Other In        | formation           |           |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     |           |        |            |         |
|                    |                     | _         |        | _          |         |
| Name of Au         | thorizing Person    | [         |        | ]          |         |
|                    |                     | _         |        | _          |         |
| Designation        |                     | [         |        | ]          |         |
| 0:                 |                     |           |        | ,          |         |
| Signatures         |                     | [         |        | J          |         |
| Date               |                     | Г         |        | 1          |         |
| Date               |                     | [         |        | ]          |         |

# **Attachment C6 – Numbering Series**

| Name of Operator | 1 | ] |
|------------------|---|---|
| Type of License  | ] | ] |
| License No.      | 1 | ] |

## For LL Operators:

| Interconnection SiteLicensed Region | Numbering Ser | ies with Prefix |
|-------------------------------------|---------------|-----------------|
| One <u>Liconoca region</u>          | From          | To              |
| ITR                                 |               |                 |
| FTR                                 |               |                 |
| LTR I                               |               |                 |
| LTR II                              |               |                 |
| STR I                               |               |                 |
| STR II                              |               |                 |
| STR-III                             |               |                 |
| R.P. TR                             |               |                 |
| STR-V                               |               |                 |
| CTR                                 |               |                 |
| FTR                                 |               |                 |
| GTR                                 |               |                 |
| NTR                                 |               |                 |
| MTR                                 |               |                 |
| WTR                                 |               |                 |
|                                     |               |                 |

## For CMOs:

| Interconnection Site | Numbering Series with Prefix |    |  |
|----------------------|------------------------------|----|--|
|                      | From                         | То |  |
| Islamabad            |                              |    |  |
| Lahore               |                              |    |  |
| Faisalabad           |                              |    |  |
| Multan               |                              |    |  |
| Karachi              |                              |    |  |

## Submitted By

| Name of Authorized Person | [ | 1 |
|---------------------------|---|---|
| Designation               | ] | 1 |
| Signatures                | ] | 1 |
| Date                      | I | 1 |

# Attachment C7 – Billing Information Test Sheet and Conformance Certificate

| Name of Operator/PMCL | ] | ] |
|-----------------------|---|---|
| Type of License       | 1 | ] |
| License No.           | ] | ] |

| S. | Α      | В      | Call start   |         | Call     | Call End     |         | Transit | Route |
|----|--------|--------|--------------|---------|----------|--------------|---------|---------|-------|
| #  | Number | Number | Date         | Time    | Duration | Date         | Time    | ln      | Out   |
|    |        |        | (dd/mm/yyyy) | (24hrs) |          | (dd/mm/yyyy) | (24hrs) |         |       |
|    |        |        |              |         |          |              |         |         |       |
|    |        |        |              |         |          |              |         |         |       |
|    |        |        |              |         |          |              |         |         |       |
|    |        |        |              |         |          |              |         |         |       |
|    |        |        |              |         |          |              |         |         |       |
|    |        |        |              |         |          |              |         |         |       |
|    |        |        |              |         |          |              |         |         |       |
|    |        |        |              |         |          |              |         |         |       |
|    |        |        |              |         |          |              |         |         |       |
|    |        |        |              |         |          |              |         |         |       |

| We hereby certify that the Calls made by [Other Party's name ] a |                         |   |   |  |  |  |
|--|-------------------------|---|---|--|--|--|
| attached Test Sheet onto   | [Receiving Party's Name |   | ] |  |  |  |
| Network are successful.  |                         |   |   |  |  |  |
|  |                         |   |   |  |  |  |
| Submitted By   |                         |   |   |  |  |  |
| Name of Authorized Person  | [                       | 1 |   |  |  |  |
|  |                         |   |   |  |  |  |
| Designation  | ]                       | 1 |   |  |  |  |
|  |                         |   |   |  |  |  |
| Signatures   | [                       | ] |   |  |  |  |
|  |                         |   |   |  |  |  |
| Date   | [                       | 1 |   |  |  |  |

# **Attachment C8 – Fault Contact Points**

| Name of Operator | [ |
|------------------|---|
|------------------|---|

| Particulars            | Islamabad | Lahore | Faisalabad | Karachi |
|------------------------|-----------|--------|------------|---------|
| Name of Contact Person |           |        |            |         |
| Designation            |           |        |            |         |
| Phone No.(s)           |           |        |            |         |
| Mobile Phone No.(s)    |           |        |            |         |
| Fax No.                |           |        |            |         |
| Email                  |           |        |            |         |
| Address:               |           |        |            |         |

| Name of Authorizing Person | [ | ] |
|----------------------------|---|---|
| Designation                | ] | ] |
| Signatures                 | ] | 1 |
| Date                       | ] | ] |

# **Attachment C9 – Fault Information Report**

| Name of Reporting Person       | [ | ] |
|--------------------------------|---|---|
| Designation                    | I | ] |
| Name of Party                  | I | ] |
| Reporting Time                 | I | ] |
| Reporting Date                 | [ | ] |
| Reported Person                | [ | ] |
| Designation of Reported Person | I | ] |
| Location  Nature of Fault      | I | ] |

| PMCL – Reference Inter | connect Offer |   |  |
|------------------------|---------------|---|--|
|                        |               |   |  |
|                        |               |   |  |
| Signatures             | ]             | 1 |  |
| Date                   | Г             | 1 |  |

# Attachment C10- Planned Maintenance Work Detail

| 1.   | Name of the Operator                       |      | [ |        | ] |              |
|------|--|------|---|--------|---|--------------|
| 2.   | Date of Maintenance Work                   | from | [ | ] to [ | ] |              |
| 3.   | Time                                       | from | [ | ] to [ | ] |              |
| 4.   | Name of the Location for maintenance work  |      | [ |        | ] |              |
| 5.   | Estimated Service Interruption Time        | from | [ | ] to [ | ] |              |
| 6.   | Nature of Work                             |      |   |        |   |              |
|      |  |      |   |        |   | -            |
|      |  |      |   |        |   | <u>-</u>     |
|      |  |      |   |        |   | <del>-</del> |
|      |  |      |   |        |   | -            |
|      |  |      |   |        |   |              |
| 7.   | Impact on Service                          |      |   |        |   |              |
|      | ·  |      |   |        |   |              |
|      |  |      |   |        |   |              |
|      |  |      |   |        |   |              |
|      |  |      |   |        |   |              |
|      |  |      |   |        |   |              |
| 8.   | Assistance Required from PMCL              |      |   |        |   |              |
|      |  |      |   |        |   |              |
|      |  |      |   |        |   |              |
|      |  |      |   |        |   |              |
|      |  |      |   |        |   |              |
|      |  |      |   |        |   |              |
| 9. ( | Contingency measures to be taken by        |      |   |        |   |              |
|      | either Party or both Parties. 10.1<br>10.2 |      |   |        |   |              |
|      | 10.3                                       |      |   |        |   |              |
|      | 10.4                                       |      |   |        |   |              |
|      |  |      |   |        |   |              |
|      |  |      |   |        |   |              |
| NJ-  | and Authorized Deves                       |      |   |        | 1 |              |
|      | me of Authorized Person [                  |      |   |        | J |              |
|      | signation [                                |      |   |        | J |              |
|      | natures [                                  |      |   |        | ] |              |
| Dat  | ∴e I                                       |      |   |        | 1 |              |

# **Attachment C11 - Request for Co-Location Space**

|       | Name        | of the Operator                                   | [   |   |   |    |   | ] |
|-------|-------------|---|-----|---|---|----|---|---|
| 1.    | Date        | of Application                                    | [   |   |   | ]  |   |   |
| 2.    | Type        | of Equipment to be Installed                      | [   |   |   | ]  |   |   |
| 3.    | Co-Lo       | ocation Space Required-Sq. feet                   | [   |   |   | ]  |   |   |
| 4.    | Powe        | r Requirements                                    |     |   |   |    |   |   |
|       | (i)         | AC – Ampere                                       | [   |   | ] |    |   |   |
|       | (ii)        | DC - Amperes                                      | [   |   | ] |    |   |   |
| 5.    | Floor       | Loading of Equipment-Weight                       | [   |   | ] |    |   |   |
| 6.    | Capa        | city of Transmission link                         | [   |   | ] |    |   |   |
| 7.    | Туре        | of Transmission link                              | [   |   | ] |    |   |   |
|       | (Micro      | owave or Optical fibre)                           |     |   |   |    |   |   |
| 8.    | Size o      | of microwave dish                                 | [   |   | ] |    |   |   |
| 9.    | Heigh       | t required at Tower – Feet                        | [   |   | ] |    |   |   |
| 10.   | Туре        | of Fibre & its Diameter                           |     |   |   |    |   |   |
|       |             | the Operator<br>authorized Signatory              |     |   |   |    |   |   |
| Desi  | gnation     |   |     |   |   |    |   |   |
| Depa  | artment     |   |     |   |   |    |   |   |
| Cont  | act Numb    | per Company Stamp                                 |     |   |   |    |   |   |
| Fax I | Number      |   |     |   |   |    |   |   |
|       |             | to the Requesting Operator<br>n non-binding basis | Yes | [ | 1 | No | [ | ] |
| Reas  | sons for re | ejection [<br>[                                   |     |   |   |    |   | ] |
| Appr  | oved PM     | CL Approval Code                                  |     |   |   |    |   |   |
| On B  | sehalf of F | PMCL  |     |   |   |    |   |   |
| Sign  | Contact I   | Number  |     |   |   |    |   |   |
| Nam   | e Fax No    |   |     |   |   |    |   |   |

# Attachment C12 – List of Interconnect Equipment to be installed

| Name of Operator | [ | ] |
|------------------|---|---|
| Type of License  | 1 | ] |
| License No.      | ] | ] |

| No. | Name Of   | Make | Specifications | Capacity | Weight | Size |
|-----|-----------|------|----------------|----------|--------|------|
|     | Equipment |      |                |          |        |      |
|     |           |      |                |          |        |      |
|     |           |      |                |          |        |      |
|     |           |      |                |          |        |      |
|     |           |      |                |          |        |      |
|     |           |      |                |          |        |      |
|     |           |      |                |          |        |      |
|     |           |      |                |          |        |      |
|     |           |      |                |          |        |      |
|     |           |      |                |          |        |      |
|     |           |      |                |          |        |      |
|     |           |      |                | _        |        | _    |

## **Submitted By**

| Name of Authorized Person | [ | 1 |
|---------------------------|---|---|
| Designation               | ] | 1 |
| Signatures                | ] | 1 |
| Date                      | [ | ] |

# Attachment C13 - List of Authorised Persons to have Physical Access at Co-Location Sites

| Name o   | f the Operator                           | [           |                       | 1                                  |
|--|--|-------------|-----------------------|------------------------------------|
| Co-Loca  | ation Site                               | 1           | 1                     |                                    |
| No.  | Name                                     | Designation | NIC / Passport<br>No. | Specimen<br>Signatures Contact No. |
|  |  |             |                       |                                    |
|  |  |             |                       |                                    |
|  |  |             |                       |                                    |
|  |  |             |                       |                                    |
|  |  |             |                       |                                    |
|  | or's Authorization of Authorizing Person | ľ           | 1                     |                                    |
| Designa  | ation                                    | 1           | 1                     |                                    |
| Signatu  | res                                      | 1           | 1                     |                                    |
| Date   |  | 1           | 1                     |                                    |
| PMCL Authorization  Name of Authorizing Person |  | 1           | 1                     |                                    |
| Designation                                    |  | 1           | 1                     |                                    |
| Signatures                                     |  | 1           | 1                     |                                    |
| Date   |  | 1           | 1                     |                                    |

# **Attachment C14 - Access Request Form**

| Name o                     | f Operator                                 | [                               |            |   | 1                  |  |
|----------------------------|--|---------------------------------|------------|---|--------------------|--|
| Date                       |  | ]                               | 1          |   |                    |  |
| Time<br>Name(s<br>required | ) of <del>Authorised</del> <u>Authoriz</u> | [<br><u>ed</u> Persons for whom | access is  |   |                    |  |
| No.                        | Name                                       | D                               | esignation |   | NIC / Passport No. |  |
|                            |  |                                 |            |   |                    |  |
|                            |  |                                 |            |   |                    |  |
|                            |  |                                 |            |   |                    |  |
| Operato                    | or's Authorization                         |                                 |            |   |                    |  |
| Name o                     | f Authorizing Person                       | [                               |            | 1 |                    |  |
| Designa                    | ation                                      | ]                               |            | ] |                    |  |
| Signatu                    | res  | [                               |            | ] |                    |  |

# **Annex D - Charges**

### **Annex D- Charges**

#### 1. General

- 1.1 The Operator agrees to pay the following Charges where applicable in accordance with Clauses 5 and 6 of the main body of the Interconnection Agreement, and the billing and settlement requirements set out in **Annex E**.
- 1.2 If PMCL incurs costs in addition to these Charges, if applicable, in providing Service under this Interconnection Agreement, PMCL reserves the right to recover its costs in addition to the Charges below, provided such costs shall be approved by the Authority after giving opportunity of representation to the Operator, and the Operator agrees to pay such costs. The only ground for such additional costs is where the Service(s) requested is (are) not already covered by this Interconnection Agreement. Such additional costs may therefore constitute a New Service be added to this Interconnection Agreement. The Operator shall be entitled to request either (i) modification of the current agreement to take into account the New Service, and the corresponding charges; or (ii) a modification of the Reference Interconnect Offer to take into account the New Service and corresponding charges.

#### 2. Charges for Call Termination

2.1 The Operator shall pay the Charges as specified below to PMCL for Call Termination Services (including termination of Domestic Calls as well International Calls onto the PMCL Network). The Charges shall be accounted for and settled on per second basis for all types of calls (local, long distance or international). For avoidance of doubt, notwithstanding anything to the contrary contained in the Interconnection Agreement, Call Termination Charges shall be paid by the Operator to PMCL for any Calls terminating in the PMCL Network which are handed over from the Points of Interconnection irrespective of the numbering series exchanged in terms of this Interconnection Agreement.

| Period                | Rs. per minute |
|-----------------------|----------------|
| From 1st January 2010 | 0.90           |

- 2.2 PMCL shall pay the Operator Charges for Call Termination as specified below.
- 2.2.1 Call Termination Charges for Cellular Mobile Operator:

| Period                | Rs. per minute |
|-----------------------|----------------|
| From 1st January 2010 | 0.90           |

2.2.2 Call Termination Charges for Fixed Line Operator:

| Call Type         | Rs. per minute |
|-------------------|----------------|
| Metropolitan      | 0.65           |
| National 25-80 Km | 0.82           |
| National > 80     | 1.20           |

Abovementioned call termination charges are subject to change as per Authority's determination.

- 3. Charges for Short Message Conveyance Services and Multimedia Message Conveyance Services
- 3.1 Where the Operator is a CMO, the Parties shall follow the principle of 'sender keeps all' for termination of Short Messages and Multimedia Messages between their Networks, unless otherwise agreed by the Parties subject to approval of the Authority.
- 3.2 Where the Operator is an LL Operator, a Party shall charge the other, and the other Party shall pay, for Short Message Conveyance Services at the rate of Rs. 0.25 for each Short Message terminated on its Network.
- 4. Co-Location and Capacity Charges
- 4.1 Subject to Clause 2.1 of Schedule B3 the Operator shall make payment to PMCL for use of PMCL's Co-Location Site, the Interconnect Capacity acquired on per E1 basis and/or any other PMCL facilities so acquired for the purpose of Interconnection as follows unless otherwise agreed:

| Description   | One-Time                                     | Recurring                             |                         |  |
|---|--|---------------------------------------|-------------------------|--|
| Capacity Charges per E1   | Rs. 60,000                                   |                                       |                         |  |
|   |  | Monthly Charges                       |                         |  |
|   |  | at Federal                            | Monthly                 |  |
|   |  | Capitals &                            | Charges at              |  |
|   |  | Divisional HQs                        | Other Cities            |  |
|   |  | Rs. 90.0 Per Sq.                      | Rs. 78.0 Per            |  |
| Transmission Room Space Charges   |  | Foot                                  | Sq. Foot                |  |
|   |  | Rs. 23,500 per                        | Rs. 21,500 per          |  |
| Rental for Antenna on PMCL Tower  |  | dish                                  | <u>dish</u>             |  |
|   |  | Rs. 32 260 Per                        | <del>Sq. Foot per</del> |  |
| Transmission Room Space Charges   | -  | month                                 |                         |  |
|   |  | Rs. 10,000 <u>28,000</u> per dish per |                         |  |
| Rental for Antenna on PMCL Tower  | -  | month                                 |                         |  |
| Electricity Charges AC Power  |  | -                                     |                         |  |
| <u>Charges</u>  | Rs. 1,000/Amp Per Month As per formula below |                                       |                         |  |
|   | _  | <u>-</u>                              |                         |  |
| Electricity Charges DC AC Power per   |  |                                       |                         |  |
| ampere  | (AC) x R                                     |                                       |                         |  |
| $\underline{DC Power per ampere} \qquad \underline{P(DC) = 70.83 \times A (DC) \times R}$ |  |                                       |                         |  |
| Where:  |  |                                       |                         |  |
| P(AC) is AC power charges   |  |                                       |                         |  |
| P(DC) is DC power charges   |  |                                       |                         |  |
| A(AC) is number of amperes of AC current provided to Operator                             |  |                                       |                         |  |
| A(DC) is number of amperes of DC current provided to Operator                             |  |                                       |                         |  |

R is WAPDA power rate/KWh for commercial users

The charges mentioned herein above shall only be increased as per Authority's approved formula / criteria. shall be subject to a 10% increase annually unless otherwise agreed between the parties.

## 5. Testing Charges

- 5.1 PMCL shall provide engineering support for the Interconnection Testing and the eventual connection of Operator Network to PMCL Network without any charge on reciprocal basis
- 5.2 Neither Party shall charge the other Party for the Calls made during Interconnection testing.

#### 6. Review of Charges

- 6.1 The Parties may mutually amend any or all Charges (including late payment charges) from time to time and notify such changes to the Authority within seven (7) days of agreeing such amendments.
- The Parties agree to amend any or all Charges on the direction from the Authority.

### 7 Applicable Taxes

7.1 For the avoidance of doubt, all charges in this Annex are quoted exclusive of any applicable taxes.

#### 8. Late payment Charges

8.1 Each Party shall make payment of late payment charges to the other Party or in the Escrow Account, as the case may be, at the rate of KIBOR plus 2% p.a. for payment made after the Due Date for the period of delay.

Annex E – Billing

#### **Annex E- Billing and Settlements**

#### 1. General

- 1.1 This **Annex E** describes the general billing and settlement procedures in respect of Charges for Services provided under this Interconnection Agreement, as well as the procedures for settling any dispute relating to Billing ("**Billing and Settlement Procedures**").
- 1.2 Enquiries relating to billing and settlement by one Party may be directed to the Nominated Representative of the other Party.
- 1.3 Billing Dispute Notices must be sent by one Party to the Nominated Representative of the other Party.
- 1.4 Subject to the main body of the Interconnection Agreement, the Parties shall comply with this Annex in relation to all aspects of the Billing and Settlement Procedures under this Agreement.

#### 2. Billing and Settlement

- 2.1 PMCL shall record the number and total duration of Calls (which for the purposes hereof mean successful Calls) and Short Messages from (or through) the Operator Network to the PMCL Network. Operator shall record the number and total duration of Calls and Short Messages from the PMCL Network to the Operator Network. PMCL shall be responsible for invoicing Operator in respect of Calls and Short Messages (where applicable) to PMCL Network in accordance with Annex B, Annex D and this Annex E. Operator shall be responsible for invoicing PMCL in respect of Calls and Short Messages (where applicable) to Operator Network from the PMCL Network in accordance with Annex B, Attachment A3, Annex D and this Annex E. Each Party is responsible for recording data for traffic from their own Network for the purpose of verifying the invoiced amounts.
- 2.2 The invoice shall be sent in the form set out in **Attachment E1** (which form may be amended from time to time by PMCL taking into account Services for which Charges are to be invoiced) along with a billing statement as set out in **Attachment E2** (which form may be amended from time to time by the PMCL taking into account Services for which Charges are to be invoiced) and CDRs in support of the invoice. The Parties shall use reasonable endeavours to ensure that the bill/invoice is issued within fifteen (15) Calendar Days after the end of the Billing Period for which the bill / invoice is made. The determination of the amount due shall include:

- (a) The total Call traffic measured in minutes at each Interconnection Site during the Billing Period in accordance with provisions of **Clause 3.5** of **Schedule B1**. All traffic should be presented by traffic type (local, long-distance, international etc. as feasible):
- (b) Short Message traffic at each Interconnection Site during the Billing Period (if such traffic is chargeable at that time by the invoicing Party); and
- (c) The payable amount for such traffic shall be calculated using the rates given in **Annex D**, and **Attachment A3** as the case may be. In addition, the due amounts for other Services shall also be presented wherever applicable.
- (d) The Charges, if any, for Co-Location services and Intra-Building circuits shall be billed in accordance with the rates set out in **Annex D** (and which need not be in relation to the Billing Period only but shall be in accordance with **Schedule C8**).
- (e) Each Party shall be responsible fully for any tax imposed by the Federal, Provincial or local Government or any other competent authority in this regard
- 2.3 The Billing Period will be a Calendar Month (except for the first Billing Period which shall commence on the Effective Date and expire on the last date of the Calendar Month in which the Effective Date falls, and the last Billing Period which shall commence from the first day of the Calendar Month in which the Interconnection Agreement terminates and expire on the date of termination of the Interconnection Agreement).
- 2.4 With respect to billing for Short Message Conveyance Service an accounting summary report, in accordance with the form agreed by the Parties, shall be sent with each invoice, provided that charging for Short Messages is applicable in relation to the Operator. This accounting summary report shall detail for each Billing Period:-
  - (a) the number of Short Messages which have been successfully delivered; and
  - (b) the identity of the Operator's SMS-C of the other Party from which each Short Message was received by the PMCL Network; and
  - (c) the total amount chargeable for such Short Messages as set out in this Agreement.
- 2.5 Except in the case where Operator opt to pay Pre-Payment Amount in terms of **Clause 20** of the main body of the Interconnection Agreement, the full amount of the invoice for each Billing Period shall be remitted by the Party receiving the invoice ("**Invoiced Party**") to the other ("**Invoicing Party**") by the Due Date.
- 2.6 Any payment not paid by the Due Date shall bear late payment charges at the rate as indicated in **Annex D** (as amended from time to time in terms thereof). Late payment charges will be calculated from the due date until the date of payment, and shall be payable to the Invoicing Party.
- 2.7 In addition to recovering late payment charges in accordance with this Agreement or exercising any other right the Invoicing Party has at law or under this Interconnection Agreement, where an undisputed amount is outstanding and remains unpaid after the Due

Date, the Invoicing Party reserves the right to take action, including without further notice to the Invoiced Party, to recover any such amount as a debt due to the Invoicing Party.

- 2.8 Payments are deemed to be received on the date the banker's draft or cashier's order or electronic transmission is received by (or into the bank account of) the Invoicing Party, unless the payment is subsequently dishonoured, in which case, payment is deemed not to have been received until cleared funds are received by the Invoicing Party together with all dishonoured fees and charges. Payment receipt means the credit of the due amount to the Invoicing Party's account.
- 2.9 If the Invoicing Party subsequently finds that some Charges have been omitted from the invoice issued, it may include the omitted Charges in the subsequent invoices at any time as a separate line item, but not later than six months from the date of issue of the relevant invoice except in cases where additional invoices become necessary due to the tariffs / rate changes notified by the appropriate authority subsequently.
- 2.10 If the Invoiced Party makes an overpayment in error, it shall notify the Invoicing Party accordingly within six (6) months of the month on which the overpayment was made with sufficient details for the Invoicing Party to be able to identify the overpayment. If the Invoicing Party verifies the overpayment, the Invoicing Party shall return the amount overpaid to the Invoiced Party or make adjustment in the next payment unless otherwise agreed.
- 2.11 Notwithstanding any other provision in this Annex, late payment Charges shall not accrue or become payable in respect of sums added to an invoice in error.
- 2.12 The Parties acknowledge that invoices cannot be warranted as being free from errors.

#### 3. Billing Disputes

- 3.1 If either Party discovers an error in the invoices, it shall promptly notify the other Party, but not later than ninety (90) Calendar Days from the date of receipt of the invoice, and the Invoicing Party shall make the adjustment necessary to correct that error in its next invoice, if it is able to verify the error.
- 3.2 Except in the case where Operator opt to pay Pre-Payment Amount in terms of **Clause 20** of the main body of the Interconnection Agreement, the Parties agree to pay undisputed portion of the invoice by the Due Date.
- If the Invoiced Party wishes to dispute in good faith an invoice prepared by the Invoicing Party ("Billing Dispute"), the Invoiced Party must notify the Invoicing Party in writing ("Billing Dispute Notice") within fourteen (14) Calendar Days from the date of receipt of that invoice ("Billing Dispute Notification Period") and make payment of the undisputed amount by the Due Date. Such Billing Dispute Notice must be sent to the Nominated Representative of the Invoicing Party. The full amount shall however be paid (or payable) if the disputed amount is less than two percent (2%). Billing disputes are applicable to individual Services and the two percent (2%) threshold noted above applies to these individual Services and not the entire invoice.

- 3.4 A Billing Dispute may only arise where the Invoiced Party has reasonable grounds to believe that an error has arisen from one of the following circumstances:
  - (a) the Invoicing Party's Billing System is, or has been, defective or inaccurate in respect of the recording of the Calls or Short Messages (if charging for Short Messages is applicable in relation to the Operator) which are the subject of the dispute;
  - (b) there is, or has been, a discrepancy between the invoice in dispute and the records generated by the Invoicing Party's Billing System;
  - (c) there is, or has been, a fraud perpetrated by the Invoicing Party; or
  - (d) the Invoicing Party has made some other error in respect of the recording of the Calls or Short Messages (if charging for Short Messages is applicable in relation to the Operator) or calculation of the Charges which are the subject of the Billing Dispute.
- 3.5 A Billing Dispute Notice given under this **Clause 3** must specify:
  - (a) the reasons for which the Invoiced Party disputes the invoice;
  - (b) the amount in dispute; and
  - (c) details required to identify the relevant invoice and Charges in dispute including:
    - (i) the account number;
    - (ii) the invoice reference number;
    - (iii) the invoice date;
    - (iv) the invoice amount; and
    - (v) the detailed billing verification information
- 3.6 For the avoidance of doubt no invoices may be disputed after the expiration of the Billing Dispute Notification Period.
- 3.7 The disputed amount shall be deposited in an escrow account ("Escrow Account") with a Bank ("Escrow Bank") by the Invoiced Party by the Due Date. The Escrow Bank and the arrangements relating to Escrow Account shall be agreed by the Parties at the time of execution of the Interconnection Agreement. Upon resolution of the Billing Dispute in terms set out hereinafter, the successful party shall be entitled to all or part of the amount deposited in the Escrow Account on the entitlement ascertained in the resolution of such Billing Dispute along with mark up/profit accrued thereon, and the balance if any (along with mark-up/profit on such balance accrued till that time) shall be provided to the other Party by the Escrow Bank. The Parties shall enter into an Agreement with the Escrow Bank to ensure that the terms of this Clause 3.7 are fulfilled.
- 3.8 Where the Invoiced Party has paid an amount and subsequently notifies the Invoicing Party of a Billing Dispute in relation to that amount within the Billing Dispute Notification Procedure, the Invoicing Party is not obliged to refund any or all of that amount until the

- Billing Dispute is resolved in respect of that amount. The Invoicing Party is not required to pay any mark up on any amount refunded in terms of **Clause 2** hereunder.
- 3.9 On issuance of the Billing Dispute Notice, the Disputing Party will do the reconciliation within fifteen (15) Calendar Days of the receipt of CDR and send its findings along with the CDRs in dispute to the Invoicing Party, failing which the dispute shall be considered resolved in favour of the Invoicing party. The Invoicing Party on receipt of the findings from the Disputing Party shall respond within fifteen (15) Calendar Days of receipt of such findings from the Disputing Party. While settling the dispute, following shall apply:
  - (a) Claim for duplicate calls will be excluded
  - (b) CDRs of Invoicing Party having "B" number out of numbering range of Invoicing Party shall be excluded
  - (c) In case the disputed calls are not found in the CDRs of the Disputing Party, the CDRs of the Invoicing Party shall be considered payable by the Invoiced Party unless the Invoiced Party disproves the claim of the Invoicing Party subject to Clauses 3.9 (a) and 3.9(b).
- 3.10 In case the dispute is related to issues other than described above, the matter will be referred to Billing Dispute Resolution Committee, comprising of equal number of members nominated by both the Parties in terms of **Attachment E3** hereof for this purpose, which will meet and try to resolve the dispute as per mutually agreed procedure.
- 3.11 If the Billing Dispute Resolution Committee is unable to resolve such Billing Dispute within thirty (30) Calendar Days from the date of issuance of the Billing Dispute Notice, then such Billing Dispute shall be escalated to a Higher Level Committee which shall be fully empowered to take the decision. Such Higher Level Committee shall consist of the chief financial officer or equivalent in each Party, or the respective nominees of each Party.
- 3.12 If the Higher Level Committee is unable to resolve a Billing Dispute within one hundred and twenty (120) Calendar Days from the date of issuance of the Billing Dispute Notice ("Negotiation Period"), either Party may seek consent of the other Party to extend the period of resolution of the Billing Dispute stating the reasons for such extension. The other Party is however under no obligation to agree to such extension.
- 3.13 Once the Negotiation Period and any extension granted under Clause 3.12 has expired, such dispute may be settled through arbitration in accordance with Clause 23 of the main body of this Interconnection Agreement.
- 3.14 Neither Party shall be allowed to reduce any amounts reported or remitted to the other Party pursuant to this Annex as a set-off or compensation for amounts owing under any other obligation between the Parties.
- 3.15 For the avoidance of doubt, and as stipulated in **Clause 21.1** of the main body, Billing disputes shall not be referred to the general Dispute Resolution Procedures provided in that

clause except as provided herein or in Interconnection Dispute Resolution Regulations, 2004.

3.16 The Parties will endeavour to install automatic billing reconciliation system as soon as possible for quick and efficient billing dispute resolution.

# **Attachment E1 - Invoice**

| [ Name and Addr<br>[<br>[                           | No. [ ] Invoice Date: [ ] Due Date: [ ] For the Month [ ] |                  |                    |  |  |  |
|---|---|------------------|--------------------|--|--|--|
| Minutes   | Description   | Unit Price - PKR | Total Amount - PKR |  |  |  |
|   |   |                  |                    |  |  |  |
| Total   |   |                  |                    |  |  |  |
| GST (if applicable                                  |   |                  |                    |  |  |  |
| Total Including GST                                 |   |                  |                    |  |  |  |
| Arrears   |   |                  |                    |  |  |  |
| Total Outstanding                                   | ]   |                  |                    |  |  |  |
| After Due Date Total lavoiged Volus Exel. CST       |   |                  |                    |  |  |  |
| Total Invoiced Value Excl. GST  Late Payment Charge |   |                  |                    |  |  |  |
| Total after Due D                                   |   |                  |                    |  |  |  |
| For [Name of the                                    |   |                  |                    |  |  |  |
| Authorized Signa                                    | tory  |                  |                    |  |  |  |

Signatures

Date

# Attachment E2 – Billing Statement for Call Termination

| Name of Operator   | [    |                   |                   |                                       | ]              |            |
|--|------|-------------------|-------------------|---------------------------------------|----------------|------------|
|  |      |                   |                   |                                       |                |            |
| Interconnect   | Date | Hour              | Type of traffic   | Calls Duration<br>No. of Minutes<br>D | No of<br>Calls | Value<br>V |
| Local Traffic  | •    | 1                 | -1                |                                       |                |            |
|  |      |                   |                   |                                       |                |            |
| Long Distance  | •    |                   |                   |                                       |                |            |
|  |      |                   |                   |                                       |                |            |
| International  | •    |                   | •                 |                                       |                |            |
|  |      |                   |                   |                                       |                |            |
|  |      |                   |                   | LD                                    |                | LV         |
| V = D x R<br>Where D = Call D<br>R = Rate Per Min<br>V = Value |      | nded off in aggre | egate to minutes) |                                       |                |            |
| Name of Authorizing Pers                                       | on   | [                 |                   | 1                                     |                |            |
| Designation  |      | ]                 |                   | ]                                     |                |            |

[

[

]

]

# Attachment E3 – List of Billing Dispute Resolution Committee

| Name of Operator           | l        | 1        |
|----------------------------|----------|----------|
| Particulars                | Member 1 | Member 2 |
| Names                      |          |          |
| Designation                |          |          |
| Phone No.(s)               |          |          |
| Mobile Phone No.(s)        |          |          |
| Fax No.                    |          |          |
| Email                      |          |          |
| Address :                  |          |          |
|                            |          |          |
| Name of Authorizing Person | ]        | ]        |
| Designation                | ]        | 1        |
| Signatures                 | ]        | 1        |
| Date                       | ]        | ]        |

**Annex F – Glossary** 

#### **Annex F- GLOSSARY**

# 1. Interpretation

- 1.1 A term or expression used in this Interconnection Agreement that starts with a capital letter and is defined in this Glossary, has the meaning given to it in this Glossary.
- 1.2 In this Interconnection Agreement, unless the context otherwise requires:
  - (a) the singular includes the plural and vice versa;
  - (b) words which are gender neutral or gender specific include each gender;
  - (c) other parts of speech and grammatical forms of a word or phrase defined in this Interconnection Agreement have a corresponding meaning;
  - (d) an expression importing a natural person includes a company, partnership, joint venture, association, corporation or other body corporate and a Government Agency;
  - (e) a reference to a thing (including, but not limited to, a chose-in-action or other right) includes a part of that thing;
  - (f) a reference to a clause, party, Annex, Schedule or Attachment is a reference to a clause of this Interconnection Agreement, and a party, Annex, Schedule or Attachment to, this Interconnection Agreement, and a reference to this Interconnection Agreement includes an Annex, Schedule, or Attachment to this Interconnection Agreement;
  - (g) a reference to a law includes a constitutional provision, treaty, decree, convention, statute, regulation, ordinance, by-law, judgment, rule of common law or equity, or a rule of an applicable regulatory authority or stock exchange and is a reference to that law as amended, consolidated or replaced;
  - (h) a reference to a document includes all amendments or supplements to that document, or replacements or novations of it;
  - a reference to a party to a document includes that party's successors and permitted assigns;
  - (j) a reference to an agreement, other than this Interconnection Agreement, includes an undertaking, deed, agreement or legally enforceable arrangement or understanding, whether or not in writing.
- 1.3 Where the day on or by which something must be done is not a Business Day, unless otherwise specified that thing must be done on or by the following Business Day.
- 1.4 Headings are for convenience only and do not affect the interpretation of this Interconnection Agreement.

- 1.5 This Interconnection Agreement may not be construed adversely to a Party because that Party prepared or drafted it.
- 1.6 Unless the context requires otherwise, the following definitions apply to words and phrases used in this Interconnection Agreement.

#### 2. Definitions

- "Access Provider" means the Party which operates the mobile network directly connected to the Messaged Customer.
- "Access Seeker" means the Party which operates the mobile network directly connected to the Messaging Customer.
- "Act" means Act No. XVII of 1996, entitled the Pakistan Telecommunications (Reorganization) Act, 1996;
- "Additional Services" means those Services that are covered in this RIO but not currently being supplied by PMCL to the other Party;
- "Authority" means the Pakistan Telecommunication Authority established under the Act;
- "Authorized Overseas Network" means electronic communications network outside the Islamic Republic of Pakistan in respect of which a Party conveys an International Call;
- "Bank Guarantee" means an irrevocable, unconditional and continuing guarantee issued in favor of PMCL by a bank whose credit has been rated at least BBB by a credit rating agency registered under the Pakistan Credit Rating Companies Rules, 1995;
- "Billing and Settlement Procedures" shall have the meaning set out in Clause 1.1 of Annex E:
- "Billing Dispute" shall have the meaning set out in Clause 3.3 of Annex E and Payments;
- "Billing Dispute Notice" shall have the meaning set out in Clause 3.3 of Annex E;
- "Billing Dispute Notification Period" shall have the meaning set out in Clause 3.3 of Annex E;
- "Billing Information" means such information provided pursuant to Annex E by one Party to the other including, without limitation, such information as is necessary to ascertain the Charges payable by each Party under this Agreement;
- "Billing Period" shall have the meaning set out in Clause 2.3 of Annex E;
- "Billing System" means a system to collate Billing Information and prepare invoices relating to charges payable by each Party under this Agreement;
- "Business Day" means any day other than Saturdays and Sundays or the gazetted public holidays of the Islamic Republic of Pakistan;
- "Busy Hour Call Attempts" or "BHCA" means the number of Call set up attempts made during peak busy hour;
- "Busy Hour Erlangs" means the traffic load during peak busy hour;
- "Calendar Day" means any day of a calendar year, including Saturdays, Sundays and gazetted public holidays of the Republic of Pakistan;

- "Calendar Month" means a month of the Gregorian calendar year;
- "Calendar Quarter" means a period of three Calendar Months commencing on 1 January, 1 April, 1 July or 1 September, as the case may be;
- "Call" means a transmission path through telecommunication systems related to the delivery of a message (consisting of speech) and any reference to the conveyance of a Call by a Party means the establishment by that Party of such a transmission path through that Party's Network and the conveyance by that Party over such transmission path
- "CDR" or "Call Detail Record" shall have the meaning set out in Clause 3.2 of Schedule B1:
- "Call Duration" means the time period starting when the called party answers until the calling or called party terminates the Call, which ever is sooner;
- "Call Termination Service" is a service provided by PMCL and/or the Operator, if applicable, in respect of Terminating Interconnected Calls from a relevant Point of Interconnection;
- "Call Termination Charge" means, the charge applicable for the provision of the Call Termination Service as described in Clause 2.1 of Annex D;
- "Call Type" shall mean Domestic Call or International Call;
- "Calling Line Identification" or "CLI" means information identifying the number of the telephone line or apparatus on which a Call or Short Message originates and which is transmitted between and within Networks;
- "Calling Party" means a person who, or apparatus which, initiates a Call or a Short Message;
- "Capacity" means in relation to an Interconnect Link, 2 Mbps (or such other bit rates agreed in writing between the Parties) ports for each Interconnect Link.
- "CCS" means Common Channel Signaling;
- "Cellular Mobile Operator" or "CMO" means an operator licensed by the Authority to provide cellular mobile telecommunications services in Pakistan;
- "Charges" refers to the charges payable by a Party for Services as listed in Annex D and the charges payable by PMCL as listed in Attachment A3 (as applicable), and such amendments thereto in accordance with this Interconnection Agreement;
- "Charge Rate Period" shall have the meaning set out in Clause 3.8 of Schedule B1;
- "CLIP/CLIR" means Calling Line Identification Presentation and Restrictions fields; "Co-Location" means the location of Interconnect Equipment at Interconnection Sites pursuant to this Interconnection Agreement;
- "Co-Location Request" means a request for Co-Location of Interconnect Equipment made under this Interconnection Agreement;
- "Co-Location Request Form" means the application form prescribed in Attachment B3; "Co-Location Site" means any PMCL site (as listed in Attachment C3) at which Co-Location is permitted by PMCL or any operator site (as listed in Attachment A2) at which Operator provides Co-location;

"Co-Location Site Access Procedures" shall be those set out in Schedule C7 (as amended from time to time);

"Co-Location Equipment and Maintenance Procedures" shall be those referred to in Schedule C7 as may be amended from time to time by PMCL;

"Co-Location Space" means space and such facilities as may be agreed to by the Parties to be provided by PMCL at the PMCL Co-Location Site for the installation and operation of Interconnect Equipment or provided by any other operator at its Co-Location Site for the installation and operation of Interconnect Equipment;

"Commissioning Date" means the date Interconnection is established after successful testing.

"Confidential Information" means all information of a Party in whatever form relating to know-how, ideas, concepts, technology, manufacturing processes, industrial, marketing and commercial knowledge of a confidential nature (whether in a tangible or intangible form) relating to or developed in connection with or in support of the business of that Party (and any matter concerned with or arising out of this Interconnection Agreement) and clearly designated as confidential at the time of disclosure or is by its nature confidential but does not include:

- information which is or becomes part of the public domain (other than through any breach of this Interconnection Agreement);
- (b) information rightfully received by the other Party from a Third Party without a duty of confidentiality being owed by that other Party to that Third Party, except where that other Party has knowledge that the Third Party has obtained that information either directly or indirectly as a result of a breach of any duty of confidence owed to the first mentioned Party;
- (c) information which has been independently developed by the other Party; or
- (d) information which is in the possession of, or is known to, the other Party prior to the date of this Interconnection Agreement, to the extent that the other Party is not bound by any existing obligation of confidentiality in respect of such information to the first mentioned Party;

# "Consequential Loss" includes without limitation:

- (a) loss of revenue;
- (b) loss of profit;
- (c) loss of anticipated savings or business;
- (d) loss of data or goodwill;
- (e) loss of value of any equipment including software;
- (f) claims of Third Parties;
- (g) costs and expenses associated with or incidental to any of the above.

"Co-ordination Committee" shall have the meaning set out in Clause 21.8 of the main body of the Interconnection Agreement;

"Customer" means, a person:

- (a) having a contract with either Party for the provision of telecommunication services by means of that Party's Network, and who is charged by that Party for the provision of its services, or
- (b) user of telecommunication apparatus directly connected to the PMCL Network or the Operator Network;

"Data Management Amendments" shall include but not be limited to changes in the data management of a Party's Network as a result of digit analysis carried out in the other Party's Network or as a result of change in the number ranges in the other Party's Network;

"DDF" means digital distribution frame;

# "Decommissioning" means:

- the closure, replacement or relocation of an Interconnect Gateway Switch (IGS) in respect of which an Interconnect Link is connected;
- (b) closure, replacement or relocation of an Interconnect Link; and/or
- (c) closure of a Co-Location Site

"Digital Analysis Data Management Amendment" shall have the meaning set out in Clause 8.9 of the main body of the Interconnection Agreement;

"Disclosing Party" means a Party making a disclosure of Confidential Information in the context of this Interconnection Agreement;

"Dispute" shall have the meaning set out in Clause 21.6 of the main body of the Interconnection Agreement;

"Dispute Resolution" or "Dispute Resolution Procedure" refers to the procedures outlined in Clause 21 of the main body of this Interconnection Agreement;

"Domestic Call" means a Call originating and terminating in a location within the borders of the Islamic Republic of Pakistan;

"Domestic Call Termination Service" means the Call Termination Service enabling a Domestic Call from another Network to be terminated on the Network of the Party providing such Service:

"Due Date" means a date being fifteen (15) Calendar Days after the date of receipt of an invoice, or if such fifteenth (15<sup>th</sup>) Calendar Day falls on a date other than a Business Day, the immediately preceding Business Day;

"Dummy CLI" means a list of non-subscriber CLI to be notified by each Party to the other Party used in the resolution of service issues in accordance with of this Interconnection Agreement;

"E1" means a unit of 2Mbps of Capacity;

"Effective Date" means the date on which this Interconnection Agreement is signed by the Parties;

"Emergency Event" means an event which causes or is likely to cause significant damage to the Network of a Party or which endangers or is likely to endanger the health or safety of any person;

- "Emergency Organization" means the relevant local public police, fire, ambulance and coastguard services and other similar organization providing assistance to the public in emergencies
- "Force Majeure" shall have the meaning set out in Clause 34.1 of the main body of the Interconnection Agreement;
- "Force Majeure Notification" shall have the meaning set out in Clause 34.3 of the main body of the Interconnection Agreement;
- "Glossary" means this Annex F;
- "Government Agency" means any department or statutory board operated by or accountable to a ministry or organ of state within the Republic of Pakistan;
- "GSM" means Global System for Mobile Communications;
- "GST" means sales tax imposed under the Sales Tax Act, 1990;
- "IAM" means Initial Address Message;
- "Integrated Services Digital Network" or "ISDN" means a set of communications standards allowing a single wire or optical fiber to carry voice, digital networks services and video:
- "Intellectual Property" shall have the meaning set out in Clause 26.1 of the main body of the Interconnection Agreement;
- "Interconnection" means the interconnection of the PMCL Network and the Operator Network;
- "Interconnection Site" means a Co-Location Site or a Third Party Interconnection Site;
- "Interconnect Equipment" means equipment for the purpose of termination of Interconnection traffic including but not limited to microwave dish, radio, multiplexer, OFDF, cabling, Tributary Panel of the types approved by the Authority;
- "Interconnection Agreement" means this interconnection agreement entered into between PMCL and the Operator including the main body of this Interconnection Agreement, the Annexes as mentioned in Clause 1.2 of the main body, Schedules and Attachments as included in the Annexes as amended, modified or supplemented from time to time;

# "International Call" means a Call which:

- (a) is handed over by an Authorized Overseas Network to the Operator Network, and is then handed over by the Operator Network to the PMCL Network for Call Termination, or
- (b) is handed over by PMCL to the Operator destined for an Authorized Overseas Network; or
- "Interconnect Capacity" means the number of E1 links for Interconnection.

# "Interconnect Gateway Switches" or "IGS" means:

- (a) in relation to PMCL, an MSC used for the purposes of Interconnection; and
- (b) in relation to the Operator, any Operator switch, designated by the Operator as being available for Interconnection;
- "Interconnect Link" means the optical fiber cable or digital radio system and the associated transmission equipment connecting PMCL's and the Operator's Interconnect

Gateway Switches for the purpose of exchanging Calls and Short Messages between the PMCL Network and the Operator Network;

- "Interconnected Calls" means Terminated Interconnected Calls
- "International Incoming Call Termination Service" means the Call Termination Service provided by a Party enabling an International Call to be terminated in the Network of the Party providing such Service;
- "LDI Operator" means an operator licensed by the Authority to provide long distance and international telecommunications services in Pakistan;
- "License" means a telecommunication services license issued by the Authority;
- **"LL Operator"** means an operator licensed by the Authority to provide local loop telecommunications services in Pakistan;
- "Messaged Customer" means a Customer of a Party to whom an MMS Message is sent.
- "Messaging Customer" means a Customer of a Party who initiates an MMS Message.
- "MMS" means a multimedia message service for delivery of MMS Messages.
- **"MMSC"** means a party's MMS centre that controls MMS Messages in a store and-forward fashion and forms part of that party's MMS Network.
- "MMS Link" means the ability for MMS Messages to pass between the parties' MMSCs, using a VPN via TCP/IP connection.
- "MMS Message" means a text, audio, video and/or data message of up to 64 kilobytes in size or as agreed by the Parties.
- "MMS Network" means a party's system or series of systems that carries, or is capable of carrying MMS Messages by means of guided or unguided electro-magnetic or optical energy.
- "Multimedia Message Conveyance Service" shall have the meaning as set out in Clause 1.2 of Schedule B4;
- "Numbering Plan" means the Numbering Plan approved by the Authority;
- "Network" means a telecommunication system of a Party or other person which is used or intended to be used for telecommunication;
- "Network Alteration" shall have the meaning set out in Clause 8.1 of the main body of the Interconnection Agreement;
- "Network Alteration Notice" means a written notice of thirty (30) Calendar Days for a Network Alteration that does not entail any change in equipment and a written notice of ninety (90) Calendar Days for a Network Alteration that entails replacement or addition of equipment;
- "New Services" means PMCL Services that are not included in this RIO;
- "Nominated Representative" of the Operator and of PMCL shall mean the person nominated by Operator and PMCL in terms of Attachment A5, which nomination may be amended from time to time by notice in terms of Attachment A5 to the other Party;
- "Number Range Data Management Amendment" shall have the meaning set out in Clause 8.10 of the main body of the Interconnection Agreement;
- "OFDF" means Optical Fibre Distribution Frame

"Operator" means a CMO, a Local Loop Operator or LDI Operator other than PMCL that uses switching or routing equipment to provide telecommunication services to the public and is a Party to this Interconnection Agreement;

"Operator License" shall mean the License issued to Operator;

"Operator Network" shall have the meaning set out in the fourth recital of the main body of the Interconnection Agreement;

"Operator Services" means the services provided by the Operator to PMCL under the terms of this Interconnection Agreement in the manner described in this Interconnection Agreement;

"Pakistan" means the Islamic Republic of Pakistan; "Pakistan

Rupee" and "Rs." mean the currency of Pakistan; "PMCL"

means Pakistan Mobile Communications Limited;

"POI" or "Point of Interconnection" means a physical point where the PMCL Network and the Operator Network are connected for Calls or Short Messages to be handed over from one Network to the other; the Point of Interconnection for the purpose of this Interconnection Agreement at Co-Location Site is Tributary Panel and in a Third Party Interconnection Site it is the PMCL DDF.

"PSTN" means the Public Switched Telecommunications Network;

"PMCL License" means the license granted to PMCL by the Authority pursuant to the Act under which PMCL runs the PMCL Network;

"PMCL Network" shall have the meaning set out in the first recital of the main body of the Interconnection Agreement;

"PMCL Services" shall have the meaning set out in the third recital of the main body of the Interconnection Agreement;

"Receiving Party" means a Party receiving Confidential Information from the Disclosing Party;

"Reference Interconnect Offer" or "RIO" means this Reference Interconnect Offer issued by PMCL consisting of the main body of the Interconnection Agreement and its Annexes and which requires certain matters to be agreed in terms of **Annex A** in order for the Parties to enter into the Interconnection Agreement.

"SDH" means Synchronous Digital Hierarchy;

"Security Deposit" means Bank Guarantee and/or Prepayment in form of cash/bank draft/check in terms of this Agreement as deposited by the Operator with PMCL.

"Services" means the PMCL Services and the Operator Services;

"Signaling Links" means a digital path between two signaling points/nodes;

"Signaling Point Code" means a unique identification assigned to the exchange used for the routing of Messages as described in ITU-T Q.704;

"Short Message" means a numeric or text message conforming to GSM 03.40 Standard of up to 160 characters to be transferred and/or originated on compatible communication devices and fixed devices;

"Short Message Conveyance Service" shall have the meaning set out in Clause 1.2 of Schedule B2:

- "SMS-C" means the function responsible for relaying and storing and forwarding of a SMS message between a sending and receiving telecommunication Network;
- "Short Message Service Centre (SMSC) or Service Centre (SC)" shall mean the function responsible for the Relaying and "Store-and-forwarding" of a Short Message between terminals.
- "SMS-MO" shall mean the transfer of a Short Message from the originating handset to an SMSC.
- "SMS-MT" shall mean the subsequent transfer of a Short Message from an SMSC to the receiving handset with the radio interface.}
- "Successful Call" means Calls for which the Called party answer signal is returned across the interface between the two Networks;
- "Specification" shall have the meaning set out in Clause 7.2 of the main body of the Interconnection Agreement;
- "Switch" means the telecommunication apparatus which performs the function of switching and routing of Calls;
- "Telecommunications" shall have the meaning ascribed to it in the Act;
- "Terminating Interconnected Calls" shall have the meaning set out in Schedule B1;
- "Termination Charge" means the Charge applicable for the provision of Call Termination Service as set out in Annex D.
- "Third Party" means any person or entity other than PMCL or the Operator;
- "Third Party Interconnect" means interconnect using a Third Party Interconnect Location
- "Third Party Network" means the Network owned or operated by a Third Party;
- "Third Party Operator" shall have the meaning set out in Clause 38.1 of the main body of the Interconnection Agreement;
- "Third Party Interconnection Site" shall have the meaning set out in Clause 12.5 of the main body of the Interconnection Agreement;
- "Tie Cable" means the cable between POI and PMCL DDF used to connect the Operator's equipment to PMCL Equipment;
- "Transmission Tie-Cable" means a screen cable that carries a 2Mbps service;
- "Trunk Group" means a group of circuits between the Parties' IGSs; and
- "Tributary Panel" means mounted hardware unit in the Interconnect Equipment Cabinet containing an assembly of port locations which connects the transmission Equipment to DDF through Tie cables to create Interconnection to either Party's Switch.
- "VPN" means a virtual private network that provides a secure connection between two networks over the Internet.