This agreement, hereinafter called the Service Level Agreement (SLA), is made on the --
--- day of Dec 25th (month/year) to be effective from 08-09-2011 between GGM/ PGM/ GM TRIPURA.....Telecom District/Circle, Bharat Sanchar Nigam Limited, having
office at....AGARTALA...... (hereinafter called BSNL) of the ONE PART and Govt. of ----
TRIPURA..... (hereinafter called SUBSCRIBER which expressions shall unless
repugnant to the context, include its successors in business, legal representatives and
administrators or permitted assigns) of the OTHER PART.

NOW the AGREEMENT WITNESSETH as follows:

1. The validity of this contract shall be for five years from the date of signing of the
contract. The contract period can be extended by mutual agreement of both
sides. Both sides reserve the right to revise the terms of SLA on mutual
agreement on annual basis.

2. BSNL shall deploy in house additional resources at the SWAN NOC for fault and
SLA monitoring of MLLN and Non-MLLN circuits. The cost of additional
resources provided by each telecom circle shall be borne by the respective State
govt. at the rate of Rs4000/circuit/annum. This amount will be increased by
Rs1000 for every three years.

3. This agreement is applicable to the circuits leased by the SUBSCRIBER from
BSNL as per details in Annexure 'A'.

BSNL shall meet service level objectives and corresponding parameters as
mentioned below at any given point of time. Service level objectives and
parameters are categorized according to:

a. Availability of Links given at clause 8
b. Quality of Links given at clause 9

Penalty calculations are mentioned at clause 10
4. Calculation of Uptime

'Uptime' refers to the availability of bandwidth across various segments. Uptime for each link shall be calculated based on the formula:

\[
\text{Uptime (In percentage)} = 100 \times \left(\frac{\text{Total Available time per Quarter} - \text{Downtime of a Link}}{\text{Total Available time per Quarter}}\right)
\]

Note:
1. Total Available time per month = (12 hrs * N days) - SLA Exclusion Time
2. N = Number of calendar days in a Quarter
3. Downtime of a link = Downtime of a particular link according to the Tier level
4. SLA Exclusion Time - as mentioned in section 8.6 including scheduled downtime

The uptime and downtime calculations will be measured for time between 08.00 Hrs to 20.00 Hrs.

5. Quality of any link is measured in terms of latency, packet loss and jitter. The terms are defined as follows:

**Latency**

"Latency" refers to the average time required for round-trip packet transfers between two-end points on the selected portions of the Backbone. BSNL is expected to give end-to-end latency of less than 60ms at all the tiers as mentioned below in this section.

**Packet Loss**

"Packet Loss" refers to the percentage of voice/video packets lost over a period of time over a network segment. BSNL is expected to ensure that maximum end-to-end packet loss will be less than 2% at all the tiers as mentioned below in this section.

**Jitter**

"Jitter" is calculated as the variance of the round-trip delay measurements by sending out multiple packets over a network segment with equal time spacing between each interval. This is measured using UDP jitter packets or any other methodology used by BSNL. BSNL is expected to ensure that the end-to-end jitter will be not more than 20ms (millisecond) at all the tiers and is to be monitored constantly.

MLLN and non MLLN Circuits
MLLN Circuits are defined as circuits provided using Managed Leased Line Network Technology. Non MLLN circuits are defined as circuits provided using conventional method of providing leased circuits.

6. Procedure of Fault booking

6.1 SUBSCRIBER shall book the fault with BSNL designated manpower deployed at SWAN NOC or on assigned number of IVRS, viz., '--------------' . (Date and time of booking of fault shall be taken as reference for the purpose of calculation of duration of non-availability of circuit.) If the circuit is a long distance circuit, the fault shall be booked at A end.

6.2 SUBSCRIBER shall abide by the prescribed fault booking procedure of BSNL.

6.3 Where the SUBSCRIBER is unable to find a BSNL representative, the fault can be booked on '--------------', which will work as alternate number in such emergency. For MLLN Circuits, Status/fault report generated by BSNL MLLN network (to the extent provided by the system) shall be taken as reference in situations where there is ambiguity about the timing and nature of fault. For non MLLN circuits, as the fault booking/monitoring process will be manual, both state Government and BSNL have to mutually agree for fault booking and monitoring mechanism procedure to be made separately.

6.4 Normally a fault docket number shall be provided to the SUBSCRIBER from BSNL on booking of fault.

7. Restoration of Faults

7.1 On receipt of complaint, BSNL shall make its best efforts to localize the fault and restore the same at the earliest. The SUBSCRIBER shall provide all necessary support for enabling testing of the circuit at any hour of the day.

7.2.1 In case the SUBSCRIBER is unable to provide necessary facilities to BSNL, BSNL will test the circuit on its own to the last point feasible and clear the fault docket after rectification of the fault. Circuit shall be presumed to be restored when BSNL has tested the circuit and cleared the fault docket after finding that the circuit is capable of working properly. The fault duration shall be accounted accordingly.

7.3 It will be responsibility of BSNL to show proper working of circuit on end to end basis through use of test instruments by sending test data while at the same time keeping the bit error rate within limits. Once circuit is brought to right condition through such tests and the data transfer by SUBSCRIBER equipment does not take place, it shall be the responsibility of the SUBSCRIBER to take
necessary action at his end. The downtime will end as soon as BSNL staff is able to show end to end data transfer using test instruments. The fault docket will also be closed simultaneously by BSNL designated manpower deployed at SWAN NOC.

8. Availability of links

8.1 The uptime requirement of every link under the below mentioned three types of links is given in table below:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Uptime of Link</th>
<th>Tier-1 Links</th>
<th>Tier-2 Links</th>
<th>Tier-3 Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>For MLLN Circuits</td>
<td>99.5%</td>
<td>99%</td>
<td>98%</td>
</tr>
<tr>
<td>2.</td>
<td>For non MLLN Circuits</td>
<td>98%</td>
<td>95%</td>
<td>92%</td>
</tr>
</tbody>
</table>

BSNL shall monitor the links continuously using their own NMS/SWAN NMS to ensure the availability of services as per the agreed service levels.

It is also understood that small amount of down time is unavoidable and therefore, service levels and the penalty calculations allow for such down times. The downtime allowable will be small for State level and will be more lenient as we move down to District level and then to Taluk level as mentioned in subsequent sections. BSNL shall meet the initial response and issue resolution time as given in table below. Issue Resolution time is exclusive of Initial Response time.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Types of Link</th>
<th>Description</th>
<th>Initial Response Time</th>
<th>Issue Resolution Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Critical (Tier-1 Links)</td>
<td>• Links between the SHQ and DHQ. Enclosed as Annexure I</td>
<td>15 mins</td>
<td>60 mins</td>
</tr>
<tr>
<td>2</td>
<td>Medium (Tier-2 Links)</td>
<td>• Links between the DHQ and BHQ. Horizontal Offices connected to the SHQ</td>
<td>30 mins</td>
<td>120 mins</td>
</tr>
</tbody>
</table>
The annexures shall be updated on a regular basis as and when the new links are added.

8.2. Determination of Downtime

For the purpose of measurement, "downtime" or "fault duration" constitutes any period of time during which the Leased Circuit is unable to transfer data due to the reasons assignable to BSNL network. Downtime of a link shall be calculated based on the data collected by the monitoring tools (NMS) of the BSNL/SWAN NMS. For non MLLN circuits, as the fault booking/monitoring process will be manual, both state Government and BSNL have mutually agreed for manual booking of fault and monitoring mechanism. Following principles apply for the calculation of the downtime:

a. Output port of the Terminal End Equipments at the SWAN PoPs or at the remote offices will be monitored by the SWAN NOC for the purpose of uptime / downtime of the link.

b. In case of fault in the links, the SWAN NOC will book the fault with BSNL’s manpower present at NOC which will accept the fault and assign a docket number.

c. A link shall be down when a “Ping” test to the remote router at the SWAN PoPs or remote offices fails due to the link failure or failure of the Terminal End Equipment supplied by the BSNL.

d. Link failures when reported by the NMS tool shall be added together for each link every quarter to arrive at the down time for that particular link for the quarter.

8.3 The SUBSCRIBER shall provide reliable and regulated A/C Power Supply for working of the network termination unit (NTU)/modem all the time. The SUBSCRIBER shall also keep the NTU/modem powered on during 0800 Hrs to 2000 Hrs. If for any reason, NTU/modem is required to be switched off, the SUBSCRIBER shall intimate at the designated BSNL officers.

8.4 The SUBSCRIBER will ensure availability of staff who are capable of dealing with the leased circuit equipment between 0800 Hrs to 2000 Hrs. The period in which
SUBSCRIBER premises is found closed or no staff is available when BSNL staff visits the premises for testing or want to test the circuit from BSNL location, will be excluded from fault duration.

8.5 The SUBSCRIBER shall provide all necessary assistance and access to its facilities for preventive and corrective maintenance to BSNL staff all the time.

8.6 In addition to the above following shall be excluded from fault duration (SLA Exclusion time):

(i) Unavailability of circuit due to power failure at SUBSCRIBER end.
(ii) Unavailability of circuit due to mishandling of BSNL equipment (NTU) or any cables attached to such equipment at SUBSCRIBER end.
(iii) Unavailability of circuit due to SUBSCRIBER modem/equipment/network at either end of the circuit.
(iv) Period between 2000 Hrs and 0800 Hrs.
(v) Unavailability of circuit due to force majeure.
(vi) Scheduled Downtime: Scheduled downtime for link maintenance as agreed mutually between state and BSNL. Further any downtime required for preventive maintenance and up-gradation shall be considered for scheduled downtime if informed three days prior to maintenance and approved by State.

9. Quality of Links

Quality of links and performance parameters to be maintained by BSNL for all the links at all the tiers are as below:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Parameters</th>
<th>Minimum Performance Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Latency</td>
<td>60 ms</td>
</tr>
<tr>
<td>2.</td>
<td>Jitter</td>
<td>&lt;20 ms</td>
</tr>
<tr>
<td>3.</td>
<td>Packet Loss</td>
<td>2%</td>
</tr>
</tbody>
</table>

10. Penalties

The first month of the SLA (entered for the first time) will be taken as 'proving-in' period. Though BSNL shall maintain the circuit to the highest possible efficiency during this period, no penalties shall be applicable.

Penalties will be calculated on quarterly basis per link. Penalty parameters will be based on availability of Links only.
10.1 Penalty on availability of Links

10.1.1 Tier-1 Links (MLLN)
- No penalty: if the uptime in a quarter is 99.5% or more, no penalty will be levied on the quarterly bandwidth charges.
- Level I penalty: In the event of the uptime of the link being below 99.5%, for every 0.25% drop in the uptime percentage, a penalty of 0.25% of the quarterly bandwidth charges shall be levied.

10.1.2 Tier-1 Links (non MLLN)
- No penalty: if the uptime in a quarter is 98% or more, no penalty will be levied on the quarterly bandwidth charges.
- Level I penalty: In the event of the uptime of the link being below 98%, for every 0.25% drop in the uptime percentage, a penalty of 0.25% of the quarterly bandwidth charges shall be levied.

10.1.3 Tier-2 Links (MLLN)
- No penalty: If the uptime in a quarter is 99% or more, no penalty will be levied on the quarterly charges
- Level I penalty: In the event of the uptime of the link being below 99%, for every 0.25% drop in the uptime percentage, a penalty of 0.25% of the quarterly charges shall be levied.

10.1.4 Tier-2 Links (non MLLN)
- No penalty: If the uptime in a quarter is 95% or more, no penalty will be levied on the quarterly charges
- Level I penalty: In the event of the uptime of the link being below 95%, for every 0.25% drop in the uptime percentage, a penalty of 0.25% of the quarterly charges shall be levied.

10.1.5 Tier-3 Links (MLLN)
- No penalty: If the uptime in a quarter is 98% or more, no penalty will be levied on the quarterly charges.
- Level I penalty: In the event of the uptime of the link being below 98%, for every 0.5% drop in the uptime percentage, a penalty of 0.25% of the quarterly charges shall be levied.
10.1.6 Tier – 3 Links (non MLLN)
- No penalty: If the uptime in a quarter is 92% or more, no penalty will be levied on the quarterly charges.
- Level I penalty: In the event of the uptime of the link being below 92%, for every 0.5% drop in the uptime percentage, a penalty of 0.25% of the quarterly charges shall be levied.

10.2 Adjustment of Penalty: Amount of penalty will be calculated on per quarter basis. The amount of penalty will be deducted from the payment of the circuit for the next quarter. Amount of penalty will not be refunded in cash by BSNL. The maximum amount of penalty for a circuit, calculated for the quarter for all SLA breaches put together shall be restricted to 10% of the rental of the circuit for the quarter during the period of SLA.

11. Termination of the Agreement

This agreement may be terminated only by the mutual, written consent of the parties giving 30 days notice.

12 Consequence of Termination

Termination of this agreement shall be without prejudice to the accrued rights and liabilities of the parties at the date of termination, unless waived in writing by the agreement made by the Parties. On termination of this agreement, the leased circuit may continue to be used by the SUBSCRIBER as per applicable terms and conditions.

13. Severability

Should any part of this agreement be declared unenforceable by TRAI/Department of Telecom through direction/order/regulation or if terms of license of BSNL are changed through any amendment or order of the Government, the parties will cooperate and take all appropriate steps to amend, modify or alter this agreement.

14. Miscellaneous

14.1 Assignment: This agreement shall be binding upon the respective successors and permitted assigns of the parties. The rights of a party hereunder may not be assigned in part to any third party without the prior written consent of the other party.
Any such permitted assignment shall not relieve the assigning party of any liability whether occurring before or after such assignment, arising out of activities carried out or events occurring prior to such assignment.

14.2 Modifications: Any of the terms and provisions of this agreement, including all Exhibits hereto, may be waived, amended, supplemented or otherwise modified only by a written instrument executed by the parties specifically and clearly stating that it is an amendment to this agreement.

14.3 Consequential Damages: BSNL shall not be liable to the SUBSCRIBER, notwithstanding any other provision to the contrary herein or under law and to the extent of any such right under law, the SUBSCRIBER hereby expressly and, irrevocably waives its right thereto, for any indirect or consequential damages arising out of this agreement including, but not limited to, loss of revenue and profit.

14.4 Date of Effect: This agreement shall become effective when executed and delivered by the each of the parties.

15. Disputes and Arbitration

15.1 In the event of any question, dispute or difference arising under this agreement or in connection there-with (except as to matter the decision of which is specifically provided under this agreement), the same shall be referred to sole arbitration of the CGM, BSNL, Circle office or in case his designation is changed or his office is abolished then in such case to the sole arbitration of the officer for the time being entrusted (whether in addition to his own duties or otherwise) with the functions of the CGM, BSNL, Circle office or by whatever designation such officers may be called (hereinafter referred to as the said officer) and if the CGM, BSNL, Circle office or the said officer is unable or unwilling to act as such the sole arbitration or some other person appointed by the CGM, BSNL, Circle office or the said officer. The agreement to appoint an arbitrator will be in accordance with the Arbitration and Conciliation Act, 1996.

There will be no objection to any such appointment on the ground that the arbitrator is BSNL Servant or that he has to deal with the matter to which the agreement relates or that in the course of his duties as BSNL Servant he has expressed views on all or any of the matter under dispute. The award of the arbitrator shall be final and binding on the parties to the agreement. In the event of such arbitrator to whom the matter is originally referred, being transferred or vacating his office or being unable to act for any reasons whatsoever the CGM, BSNL, Circle office or the said officer shall appoint another person to act as arbitrator in accordance with terms of the agreement and the person so
appointed shall be entitled to proceed from the stage at which it was left out by his predecessors.

15.2 The arbitrator may from time to time with the consent of parties enlarge the time for making and publishing the award. Subject to aforesaid Arbitration and Conciliation Act, 1996 and the Rules made thereunder, any modification thereof for the time being in force shall be deemed to apply to the arbitration proceeding under this clause.

15.3 The venue of the arbitration proceeding shall be the Circle office or State HQ or such other Places as the arbitrator may decide.

15.4 Any party shall not use any information obtained from other party during the course of dispute resolution process under this clause for any purpose other than to resolve the dispute and such information shall not be used in any litigation.

15.5 Both parties shall use their best efforts in good faith and best intention to resolve disputes by mutual negotiation and consultation and shall settle amicably any dispute that may arise or relate to this agreement or a breach thereof.

16. Force Majeure

Neither BSNL nor the SUBSCRIBER shall be liable to the other for any delay in or failure of performance of their respective obligation under the agreement caused by occurrences beyond the control of BSNL or the SUBSCRIBER including but not limited to fire (including failure or reductions), acts of God, acts to the public enemy, was, insurrections, riots, strikes, lockouts, sabotage, any law, status or ordinance, thereof of any other local authority, or any compliance therewith or any other causes, contingencies of circumstances similar to the above. Either party shall promptly but not later than twenty days thereafter notify the other of the commencement, and cessation of such contingencies, and if such contingencies continues beyond three months. Both parties agree upon the equitable solution for termination of this agreement or otherwise decide the course of action to be adopted.

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be executed through their respective authorized representatives on the day and year first above written.

Signed and Delivered for and on behalf of BHARAT SANCHAR NIGAM LIMITED.

By ____________________________
(SRI UTPAL CH. BHAUMIK), DE(Transmission)

Signed on behalf of Govt. of Tripura

By ____________________________

In the presence of:
1. ____________________________
   (S.C. DEEPAK)
   D.UT. Comp. 10
2. ____________________________
   (A. Datta, 8.1.17)
   Deputy Secretary, IT
   Govt. of Tripura.