No.: 51-49/2017/NOFN-Ops

Dated: 09-10-2017

To The All ÇGMs BSNL

Subject: O&M of Optical Fibre & Leveraging of BharatNet under revenue share arrangement and OLT Space and Infrastructure Charges between BBNL and BSNL

Kindly find attached the agreement on the above subject for BharatNet phase I, signed between BBNL & BSNL. Circles are requested to implement according to the methodology prescribed and raise the bills for services provisioned. It has following salient features-

- BSNL will perform Operation & Maintenance of BharatNet from OLT to ONT comprising of existing as well as incremental OFC along with its accessories, joint chambers etc. in the states where BSNL is the executing agency. Procedures/Formats for raising demand / invoice for O&M has been already uploaded vide 51-48/2016/NOFN-Ops (part II) dated 12.07.2017 and for expenditure on O&M of incremental OFC, guidelines has been issued and uploaded on BSNL intranet Portal by 51-47/2016/NOFN-Ops (part II) dated 12.07.2017 and 51-48/2016/NOFN-Ops (part I) dated 13.12.2016.
- 2. BBNL will pay BSNL for building space and sharing of miscellaneous infrastructure that includes DC Power at ~48V upto 10A/transmission bay, AC power supply for lights, fans, testing instruments etc., Air conditioning charges, Generator backup, Earth tapping charges, and Fire equipment sharing for OLT locations in all circles as per the rates mentioned in the agreement from the date of installation of OLTs.
- 3. BSNL shall use its existing fibres, OLTs, ONTs and new incremental fibre under BharatNet for providing services in Gram Panchayat area on revenue share basis. The revenue share shall be 10:90 for the year 2015-16 and 2016-17, 20:80 for the year 2017-18 and 30:70 for the subsequent years between BBNL and BSNL.
- 4. BBNL shall provide bandwidth to TSPs/ISPs/MSOs/OSPs on non discriminatory basis on its commercial tariff on BharatNet including existing fibre of BSNL. BSNL shall provide access for termination of OFC of any service provider as authorized by BBNL. The revenue share in this case will be in the ratio of 70:30 between BSNL and BBNL.
- The spare fibres of BharatNet will be marketed by BSNL on behalf of BBNL for which BBNL will share 20% of earned revenue to BSNL.

Encls: - As above

ENDT TA 30-6 2017-18 TP/NOFN 99 dtd 11/10/17 AGM (NOFN-OPS)

To

PGM HTD/KHM/NZB

Sub:- MOU between BSNL & BBNL on NOFN Project -reg

Letter received from Corporate office on the subject cited above is forwarded here with for kind info and necessary action please

AGM (TP)
O/o CGMT Hyderabad

Copy to: GMM (STR) for kind info & n/a pl O/o GM (NOFN-OPS) 6" Fl., Bharat Sanchar Bhawan, Janpath, New Delhi-110001



BHARAT SANCHAR NIGAM LIMITED



No.: 51-49/2017/NOFN-Ops

Dated: 09-10-2017

The All CGMs BSNL

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- 5. The spare fibres of BharatNet will be marketed by BSNL on behalf of BBNL for which BBNL will share 20% of earned revenue to BSNL.

Encls: - As above

AGM (NOFN-Ops)

Regd. & Corporate office: Bharat Sanchar Bhawan, H C Mathur Lane, Janpath, New Delhi-110001 Corporate Identity Number (CIN): U74899DL2000GOI107739 Website: www.bsnl.co.in



INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

e-Stamp

Certificate No.

Certificate Issued Date

Account Reference

Unique Doc. Reference

Purchased by

Description of Document

Property Description

Consideration Price (Rs.)

First Party

Second Party

Stamp Duty Paid By

Stamp Duty Amount(Rs.)

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Article 5 General Agreement

: Not Applicable

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: BBNL

Not Applicable

BBNL WWA Month

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Please write or type below this line..

AGREEMENT

O& M of Optical Fiber & leveraging of BharatNet under Revenue share arrangement and OLT Space and Infrastructure Charges between BBNL and BSNL

This Operations & Maintenance agreement for BharatNet project made on this 4th day of October, 2017 and is being executed in New Delhi.

O&M Agreement on Revenue Sharing Model BBNL-BSNL 4th October

BETWEEN:

Bharat Broadband Network Limited (CIN U64100DL2012GOI232070), a Company incorporated under the provisions of the Companies Act, 1956 and having its registered office at Room No.306, 3rd Floor, C-DOT Campus, Mandi Gaon Road, Mehrauli, New Delhi-110030 (hereinafter referred to as "BBNL" which expression shall, unless repugnant to the context or meaning thereof, include its successors and assigns) (being represented through GM(NOC, NMS&DC) DL who is duly authorized.

AND

Bharat Sanchar Nigam Limited(CIN U74899DL2000GO1107739) a Company incorporated under the Companies Act, 1956, having its Registered Office at Janpath H.C. Mathur Lane New Delhi-110001 (hereinafter called "BSNL" which expression shall unless repugnant to the context, include its successors and assigns) (being represented through GM(NOFN-Ops) who is duly authorized

(Hereinafter referred to, individually, as the "Party" and collectively, as the "Parties")

WHEREAS:

- 1. BBNL was incorporated on 25.02.2012 by Govt. of India under the Administrative Ministry of Communications & Information Technology, Department of Telecommunications with the aim to carry out the business of establishment, management and operation of NOFN now BharatNet with a view to provide high speed connectivity to all Gram Panchayats (GPs) by extending the existing and future Optical Fiber network and to provide access to bandwidth in a non-discriminatory manner to all eligible service providers.
- As perrevenue sharing arrangement/ "In principle understanding" between BSNL and BBNL (vide Annexure -1) and approved by DOT, BSNL shall be responsible for the O&M of existing fiber and infrastructure at OLT locations and BBNL shall be responsible for O&M of incremental fiber.'(Accordingly this agreement is for O&M of incremental fibre on behalf of BBNL).
- BSNL has agreed to carry out O & M of incremental fiber in the states where BSNL is the Executing Agency. Further BSNL has also agreed to carryout O & M of the infrastructure at OLT locations.
- 4. BBNL shall pay for O & M of incremental fiber and infrastructure at OLT locations. The rates at which O & M of incremental fiber is to be carried out shall be as agreed under Revenue share arrangement. BBNL shall pay for O & M of infrastructure at OLT locations at the mutually agreed rates.
- BSNL shall use its existing fiber, incremental fiber laid and OLTs & ONTs installed under BharatNet for providing services in Gram Panchayat area on revenue sharing basis.

NOW IT IS HEREBY AGREED BY AND AMONGST THE PARTIES HERETO as follows:
Bharat Broad Band Network Ltd.

Bharat Broad Band Network Ltd.

Own Agreement on Revenue Sharing Model BBNL-BSNL 4th October 2012 FU

7th Floor, Sheshi 110092 Page 2 of 20

Sharing Model BBNL-BSNL 4th October 20

DMRC Site, Delhi-110092 Page 2 of 20

B.S.N.L. Corporate Office New 22-10

DEFINITIONS AND INTERPRETATION:

- 1.1. "Agreement" shall mean the Agreement herein containing the Terms & Conditions set forth and agreed therein, including all other documents expressly annexed thereto or incorporated therein.
- 1.2. "Sub-Contractor" shall mean any person (other than the contractor) named in the contract for execution of any part of the works or any person to whom any part of the contract has been entrusted with the consent of the BSNL and include such sub-contractor and the Sub-contractor's legal successors in title but not any assignee of the contractor.
- 1.3. "Nodal officer" shall mean the officer nominated by BBNL in writing to act as coordinator for the purpose of this work.
- 1.4. "O&M Manager" shall mean the Operation and Maintenance official nominated by BSNL in writing who shall be responsible for co-ordination with BBNL and for all activities concerning the O&M of the Project.
- "Parties" and "CPSU" shall mean Bharat Broad Band Network Limited (BBNL) and Bharat Sanchar Nigam Limited (BSNL).
- 1.6. "Incremental OFC" means the BharatNet OFC laid by BSNL for BBNL.
- 1.7. Words singular shall include the plural and vice versa, where the contexts so desire.
- 1.8. Clause headings are inserted for ease of reference only and shall be ignored in interpreting the terms of this agreement.
- 1.9. OLT Optical Line Terminal
- 1.10. ONT Optical Network Terminal
- 1.11. OFC Optical Fiber Cable
- 1.12. EMS- Element Management System
- 1.13. DCN Data Communication Network
- 1.14. NOFN National Optical Fiber Network
- 1.15. SLA Service Level Agreement.
- 1.16. NMS –Network Management System
- 1.17. NOC Network Operation Center.
- 1.18. GPON Gigabit Passive Optical Network which includes OLT & ONT
- 1.19. Solar Power System Solar panel alongwith Controller and Batteries
- 1.20. QoS Quality of Service.
- 1.21. KPI Key Performance Indicators
- 1.22. SPV Solar Photo Voltaic Cell (panel/system)
- 1.23. GIS Geographic Information System
- MTTR (Maximum /Mean/ Minimum) Time To (Repair/ Recover/ Restore/ Respond/ Replace)
- 1.25. Net Revenue: Net Revenue is the revenue shared by BBNL/ BSNL, as the case may be, after the share of third party, if any.
- 1.26. OTDR Optical Time-Domain Reflect meter
- 1.27. BharatNet Earlier known as NOFN (National Optical Fibre Network).
- 1.28. SSA –Secondary switching Area.
- 1.29. Revenue Sharing arrangement -As defined in Clause 6 of this agreement.

2. GENERAL

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- 2.1 BSNL will perform operation and maintenance of BharatNet from OLT to ONT comprising of existing as well as incremental OFC along with its accessories, joint chambers etc in the states where BSNL is the Executing Agency and infrastructure at OLT locations in all states. However O&M of incremental fibre in all the 6 (six) blocks of Haridwar district and 31 (thirty-one) blocks in UP are being considered for CSC-SPV which will be excluded from the scope of work of BSNL from the date it is made over to CSC-SPV. BBNL is at liberty to withdraw / add any block for O&M of the incremental fibre from BSNL for which BBNL shall intimate to BSNL three months in advance. BSNL shall continue to do the O&M of existing fibre in these blocks and infrastructure at these OLT locations.
- 2.2 BSNL shall be responsible for the O&M of existing fibre and infrastructure at OLT locations and BBNL shall be responsible for O&M of incremental fiber. BBNL shall pay for O&M of incremental OFC and infrastructure at OLT locations to BSNL. The cost of O&M of the existing fibre will be borne by BSNL.
- 2.3 For effective monitoring of O&M activities and booking, escalation and rectification of complaints/ faults in respect of BharatNet, BSNL & BBNL shallfinalize the operating procedure jointly.
- 2.4 BBNL will provide the access of BharatNet NMS application to support BSNL to monitor & manage network faults effectively. To effectively utilize NMS tool, all the network related details required for effective monitoring and troubleshooting of network fault, RCA etc. shall be maintained & updated by BSNL. In addition, BSNL will be free to use their own tools & testers to bring more efficiency in faults management & improve network availability.
- 2.5 Booking and compliance of complaints/ faults in respect of BharatNet will require interflow of complaints/Trouble tickets and compliances messages between BSNL CRM/complaint handling system and BBNL NOC/NMS. A suitable mechanism for this purpose shall be decided jointly by BSNL and BBNL
- 3 Scope of BBNL
- 3.1 Network Operation Centre (NOC) Which includes
 - a. Faults & Trouble Ticket management
 - b. Provisioning
 - c. Configuration
 - d. Network Security
- 3.2 Monitoring of SLA and Network KPIs.
- 3.3 Monitoring of Performance, QoS etc.
- 3.4 Implementation of Warranty/ AMC agreements.
- 3.5 Monitoring of DCN.

4 Scope of BSNL

- 4.1 BSNL will perform operation and maintenance of BharatNet from OLT to ONT comprising of existing as well as incremental OFC along with its accessories, joint chambers etc. in the states where BSNL is the Executing Agencyand infrastructure at OLT locations in all states as per following scope of work.
 - a. O & M of incremental fiber
 - b. O & M of existing fiber

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O&M Agreement on Revenue Sharing Model BBNL-BSNL 4th October 2017
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Bharat Broad Band Network Ltd. 7th Floor, Shastri Park, I.T. Park, DMRC Site, Delhi-110092 (PRAFUL KUMAR STATA)
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- c. Planned maintenance (Laying/ replacement /shifting of incremental OFC)
- d. Preventive maintenance
- e. O & M of infrastructure at OLT locations

4.2 O & M of incremental fiber:

- 4.2.1 Fiber Faults can be broadly categorized in below categories:
 - a. Fiber Cut / Break / Deterioration / Signal Loss
 - b. Patch Cable / Connector Problem
 - c. Section Isolation
 - d. Low Optical Power
 - e. Splitter fault
- 4.2.2 O & M of incremental fiber: shall include following -
- 4.2.2.1 BSNL shall endeavor to maintain the OF cable in healthy condition by keeping the overall section loss within the permissible limits of 0.6 dB per Km (at 1550 nm) and splice loss of less than 0.05 dB for joints / tapping's.
- 4.2.2.2 O & M of incremental fiber: shall include following
 - a. To locate and restore the fiber faults as per SLA and intimate the NOC immediately after restoration.
 - b. Rectify or replace the faulty and deteriorated OFC route with material.
 - c. Prepare the revised ABDs incorporating all changes in the cable route within 1 week of such change.
 - d. Update the OFC inventory in GIS tool as per changed parameters due to replacement of OFC, joint or any other optical parameter such as no. of joints, link loss revised fibre loop length etc.
- 4.2.2.3 The maintenance Team shall
 - a. Follow the principles of fiber splicing as provided by BBNL.
 - b. Maintain sufficient stock of the OF accessories in each support center
 - c. Follow Fault occurrence / Reporting and Maintenance Procedure as defined in Annex-II.
 - d. Interact with NOC and updating the cable/ equipment fault status online in NMS.
- 4.2.2.4 BSNL shall provide sufficient maintenance infrastructure/teams as may be essential to meet out Service Level Agreement (SLA) as per clause No. 6.11 of this agreement.
- 4.3 O & M of existing fiber:

BSNL shall perform the O & M of existing fiber as per provisions of Revenue share arrangement agreed between BSNL and BBNL at their own cost and approved by DOT (vide Annexure -1).

Planned maintenance (Laying / Replacement / shifting) of incremental OFC Route

Bharat Broad Band Network Ltd. 7th Floor, Shasin Agreement Revenue Sharing Model BBNL-BSNL 4th October 201 DMRC Site, Delhi-110092

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- 4.4.1 BSNL shall carry out planned event management in live network in respect of the following as per process. The payment of such work shall be in addition to O&M charges and claimed as per 'working procedure for claiming payment' prescribed here under:
 - a. Shifting of the incremental OFC route/section whenever required due to developmental works, local authority's requirement or due to any other reason like natural calamity etc. with intimation to BBNL.
 - b. Laying of OFC for Replacement of High loss cable section.
 - c. Laying of OFC in case of shifting of ONT or installation of new ONT.
 - d. Prepare the revised ABDs incorporating all changes in the cable route within 1 week of such change.
 - e. Update the OFC network and inventory in GIS tool as per the changed parameter due to replacement / diversion of the OFC route.
- Whenever BBNL require another fiber(s) on incremental cable laid in BharatNet on any 4.5 route. BSNL will do end to end built-up of fibers. Further in case the fibers do not meet the optical parameter as per the defined limits, necessary repair would be done by BSNL as defined above.
- Preventive Maintenance: 4.6
 - BSNL shall take necessary steps to maintain basic Hygiene, surveillance of fibre and joint chambers
 - ii. BSNL shall also closely liaison with the local authorities so as to update itself with the proposed works that may be executed by them in near future.
- Technical and Maintenance Support:
- BSNL shall provide sufficient maintenance infrastructure/teams as may be essential to meet out Service Level Agreement (SLA).
- 5.2 The Technical Support Centre (s) shall work as maintenance center(s) and shall be responsible for restoring of the faulty fiber segments and shall also maintain a requisite minimum stock of cable joints closures, OF cables and accessories, patch cords etc required to maintain fiber segments under its jurisdiction, so that the Service Level Agreement conditions are met at all times.
- 5.3 BBNL shall provide web based NMS access with necessary rights to Support Centre staff as well as the officers to whom the complaint is to be escalated in BSNL BSNL shall intimate Addresses, Phone number, email/FAX Number and the maintenancepersonnel of the support centers as well as those to whom the complaint is to be escalated, in writing to BBNL.
- 5.4 BSNL shall nominate one nodal person for fiber fault rectification, coordination with BBNL NOC Delhi &Bengaluru.

Revenue Share and other Commercial Terms and Conditions: .. -dm SAM.

Bharat Broad Band Network Ltd.

7th Pool Sagrement of Revenue Sharing Model BBNL-BSNL 4th October 2017

DMRC Site, Delhi-110092

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- BSNL shall use its existing fibre and OLTs, ONTs & new incremental fibre under BharatNet for providing services in Gram Panchayat area on revenue share basis. BSNL can also use splitter at GP location for horizontal connectivity for providing these services. The revenue share shall be based on the net revenue. In case the services are offered through channel partners on revenue share basis, the revenue share between BBNL and BSNL shall be based on the net revenue to BSNL and BBNL as the case may be.
- 6.2 BSNL shall provide services to the Govt. Agencies/institutions herein called "specified institutions" for which BSNL has specified special concessional tariff plans as under:

Plan	Tariff per months (Rs)	Download+ Upload Limit (GB)	Speed Mbps)	Speed for unlimited usage beyond allowed limit (Kbps)
GP699	699	10	2 5 8	361 bru 304 512 11 14 1
GP999	999	20	2	512
GP1499	1499	40	4	512

- 6.3 BSNL can also use BharatNet for providing commercial services on revenue share basis.
- BSNL shall extend all the existing infrastructure required for OLT like Air conditioning, Earthing, Fire-Fighting arrangement and uninterrupted power etc.
- The revenue share shall be 10:90 for the years 2015-16 & 2016-17, 20:80 for the year 2017-18 and 30:70 for subsequent years between BBNL and BSNL.
- 6.6 BBNL shall provide bandwidth to TSPs/ISPs/MSOs/OSPs on non-discriminatory basis on its commercial tariff on BharatNet including existing fibre of BSNL. BSNL shall provide access for termination of OFC of any service provider as authorised by BBNL on BBNL FDF for which no charge would be levied by BSNL. The revenue share in this case will be in the ratio of 70:30 between BSNL and BBNL.
- 6.7 Spare fibers of the NOFN will be marketed by BSNL on behalf of BBNL for which BBNL will share 20% of earned revenue to BSNL.
- 6.8 BSNL is allowed to use up to 4 spare fibres under NOFN incremental OF cables for using in their network for which no O&M charges shall be paid and no revenue sharing shall be done. BBNL will give one extra fibre free of cost to BSNL for maintenance.
- 6.9 BBNL will pay to BSNL for the operation and maintenance of remaining BharatNet incremental Fibers at the following rates (excluding of Taxes) per Km per Annum:

Remaining Fibers	2015-16/2016-17 (Rs)	2017-18 (Rs)	2018-19 (Rs)
23-24 F	12000	13500	15000
22 F	10500	12000	13500
21 F	9000	10500	12000
20 F	7500	9000	10500
19 F	6000	7500	9000

6.10 Date of effect of O & M charges: The O&M of incremental fiber shall take effect from the date of AT of incremental fiber.

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7th Floor, Shastri Park, I.T. Park, DMRC Site, Delhi-110092 B.S.J.L. Corporate

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- 6.11 BSNL shall strive for restoration of fault by 20:00 hrs of next day of reporting of the fault to BSNL. Beyond that BSNL shall give rebate @ Rs. 50 per day. However, the maximum rebate shall be limited to Rs. 500/- per fault.
- 6.12 Planned maintenance charges (Laying, replacement and shifting): For Laying, replacement and shifting as specified at para 4.4, incremental OF cables with material at the extant rates of SDCA / SSA plus 16.5% plus all applicable taxes shall be charged.
- 6.13 Applicability of O & M rates to pilot sites: The rates mentioned in Para 6.8 above for year 2015-16 shall also be applicable to O & M charges in BharatNet Pilot blocksw.e.f. date of commissioning.
- 6.14 BBNL will pay to BSNL OLT Space and Infrastructure Charges at a discount of 40% on the charges applicable as on 01-04-2014 derived from the charges w.e.f 01-04-2009 and an annual increase of 10% every year thereafter. Accordingly, table 1 for charges of building space and table 2 for Misc. infrastructure services is given below -

Table -1 Charges for Building space -

S.No	Classification of cities/ towns*	Charges w.e.f 01.04.2009(Rs. Per annum per bay)	Charges as on 01.04.2014 after 10% increase per annum	Discount	Charges w.e.f 01.04.2014 (Rs. Per annum per bay) with 10% annual increase
1	X	61,606	99,217	40%	59,530
2	Y	47,916	77,169	40%	46,301
3	Z	26,620	42,872	40%	25,723

Table-2 Misc. Infrastructure Service Charges

S.No	Classification of cities / towns*	Charges w.e.f 01.04.2009(Rs. Per annum per bay)	Charges as on 01.04.2014 after 10% increase per annum	Discount	Charges w.e.f 01.04.2014 (Rs. Per annum per bay) with 10% annual increase
1	X	2,95,778	4,76,353	40%	2,85,812
2	LOF cables for Y	2,66,200	4,28,718	40%	2,57,231
3	Z da prinaria suns	1,99,650	3,21,538	40%`	1,92,923

- *Note: Classification of cities / towns are as per Govt. of India Department of Expenditure O.M. No. 2(13)/2008-E.II (B) dated 29.08.2008 on re-classification of cities and revision of rates of house rent.
- 6.15 In case DC power requirement will be more than 10A per transmission bay, then proportionate increase will be applicable. Other terms and conditions remains same.
- 6.16 The effective date for payment of OLT Space and Infrastructure charges should be from date of installation of OLT.
- 7. Working procedure for claiming payment:

7.1 For O&M:

Bharat Broad Band Network Ltd.

O&M Agreement on Revenue Sharing Model BBNP-BSNL 4th October 2017 Estudies (the

- a) Demand for advance/Invoice for O&M charges shall be raised on quarterly basis as per the process defined separately.
- b) In the beginning of quarter, 90% advance amount on account of O&M charges for that quarter shall be claimed.
- c) Balance 10% amount shall be released by BBNL after adjustment/settlement of rebates as applicable on submission of bill/invoice by BSNL
- d) Block wise demands for advance and invoices will be prepared by SSAs and will be submitted to BBNL State Heads/PMUs at Circle level through circle nodal officer.
- e) Demand for advance shall be submitted within 1st week of the quarter for all the route/segments ATed upto end of previous quarter. BBNL should release advance within 15 days of demand note.
- f) The advance claimed for a quarter shall be adjusted against the invoice of the same quarter. Payment of advance of any quarter shall not be delayed or withheld due to pendency of settlement of any invoice/invoices or due to any other reason.
- 7.2 Planned Maintenance charges(for Laying, replacement and shifting) of incremental OF
 - Administrative charges and establishment expenses will be payable at the rate of 16.5% on the basic CAPEX for planned maintenance which is in line with the Cabinet approval and 90% advance may be paid to BSNL.
 - Balance to be released after settlement of bills submitted by BSNL.
 - Block wise demands for advance and invoices will be prepared by SSAs and will be iii. submitted to BBNL state heads/PMUs at Circle level by circle nodal officer.
- Other General Terms:
 - Providing services under revenue share arrangement shall require issue and interflow of advice notes between BSNL and BBNL and vice versa, identification of customers and services provided through BharatNet and revenue generated to be shared between the two organizations. Detailed requirements and methodology for this purpose may be worked out jointly by BBNL and BSNL separately.
 - The revenue share between BSNL and BBNL shall be settled on quarterly basis.
- 9. Validity:

This agreement shall be valid till 31-3-2019, which may be extended by another three years with mutual consent of Parties.

10. Both the parties shall ensure that no damage/ destruction are caused to the other party's properties during any installation /maintenance activities. If any damage/ destruction is caused by either party's personnel or its authorized representatives to other party's installations/properties, such damage/destruction shall be rectified/replaced by the party, in accordance with the mutually agreed procedures/modalities to be worked out.

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O&M Agreement on Revenue Sharing Moder BB 7th Floor, Sharing 100 LT. DMRC Site, Delhi-110092

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If, at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, accidents, epidemics, quarantine restrictions, strikes, lockouts or act of God (hereinafter referred to as events) provided notice of happenings of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such nonperformance or delay in performance, and deliveries/ services under the contract shall be resumed as soon as practicable after such an event come to an end or cease to exist, and the decision of BBNL as to whether the deliveries/ services have been so resumed or not shall be final and conclusive. Further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reasons of any such event for a period exceeding 60 days, either party may, at its option, terminate the contract.

12. TERMINATION FOR DEFAULTS:

- 12.1 BBNL may, for default due to deficiency in Quality of Service,, without prejudice to any other remedy for breach of contract, by written notice sent to BSNL, terminate this contract in whole or in part
 - (a) If BSNL fails to deliver services within the time period(s)specified in the contract, or any extension thereof granted by BBNL.
 - (b) If BSNL fails to perform any other obligation(s) under the Contract; and
 - (c) If BSNL, in either of the above circumstances, does not remedy its failure within a period of 3 months (or such longer period as BBNL may authorize in writing) after receipt of the default notice from BBNL.
- BSNL may, for default due to deficiency in payment as per schedule, without prejudice to any other remedy for breach of contract, by written notice sent to BBNL, terminate this contract in whole or in part
 - (a) If BBNL fails to release the applicable advances for operation and maintenance charges within the time period(s) specified in the contract, or any extension thereof granted by BSNL.
 - (b) If BBNL fails to perform any other obligation(s) under the Contract; and
 - (c) If BBNL, in either of the above circumstances, does not remedy its failure within a period of 3 months (or such longer period as BSNL may authorize in writing) after receipt of the default notice from BSNL.

TERMINATION FOR INSOLVENCY:

BSNL/BBNL may at any time terminate the Contract by giving written notice to BBNL/BSNL, without compensation to BBNL/BSNL if BBNL/BSNL becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to BSNL/BBNL.

ARBITRATION: 14.

14.1 In the event of any question, dispute or difference arising under this Agreement or in connection therewith (except as to the matters, the decision to which is specifically provided under this Agreement), the same shall be First referred for Conciliation amongst the CMDs of the parties concerned. If the conciliation does not lead to settlement of the dispute within 60 days, the matter shall be referred to Secretary Telecom for mediation within 30 days. If the mediation fails, the dispute shall be referred within further 30 days for arbitration to Permanent Machinery of Arbitrators (PMA) as per clause 14.2.

In the event of any dispute or difference relating to the interpretation and application of the provisions of the contracts, such dispute or difference shall be referred by either

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party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act shall not be applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary/ Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusively.

15 SET OFF:

BSNL or BBNL may set - off any amount due or outstanding to BSNL or BBNL, as the case may be, arising from or under this agreement or otherwise from other agreement between the parties, against any sums of amount which BSNL or BBNL owe due or outstanding to the BSNL or BBNL, as the case may be, or any other respective claims under this agreement or otherwise under any other agreement between parties.

- JURISDICTION: This Contract/ Agreement is subject to jurisdiction of Court at New Delhi only.
- 17 THIRD PARTY DISPUTE:
- 17.1 If any litigation/ arbitration cases crop up during the process of placement of various contract orders or thereafter by BSNL on behalf of BBNL, BSNL shall on behalf of BBNL resolve the same on their own, BBNL shall provide necessary details, if required.
- 17.2 The cost of arbitration/ litigation will be borne by BBNL except in cases arising out of shortcomings or inefficiencies in tender/ purchase orders issued by BSNL or arising out of any other incidence solely attributable to BSNL.
- 18 ASSIGNMENT:
- 18.1 Unless otherwise agreed in writing, no rights, benefits or obligations under this Agreement may be assigned by a party without prior written consent of the other Party.
- 18.2 If either Party appoints an agent for the purpose of this Agreement and notifies the other Party, then the other party shall deal with the appointed agent for such purpose until the first party notifies the other party that the said appointment has been terminated. Notwithstanding the above, both parties hereto shall be solely and primarily responsible for performance of their obligations under this Agreement.
- 19 LIABILITIES:
- 19.1 Notwithstanding any other provisions of this Agreement, neither party shall be liable to each other for any incidental, indirect, special or consequential damages, including but not limited to costs, claims, damages, losses or expenses arising from loss of revenue or profits, loss of use, anticipated savings or wasted expenditure, corruption or destruction of data or for any indirect or consequential loss or damage whatsoever, arising out of the performance or non-performance of any provision of this Agreement.
- 19.2 Except as otherwise specifically provided herein, neither party shall be liable for any breach of this Agreement where the breach is caused by Force Majeure.

20 AMENDMENT:

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to and feet the same terms.

This Agreement may be amended or modified if necessary by a written instrument signed by the Parties and the same shall be considered as an integral part of this Agreement.

21 EFFECTIVE DATE:

This Agreement shall be deemed to have come into force with effect from the date of signing of this Agreement. All rights, obligations and responsibilities of BBNL and BSNL shall be deemed to have commenced and accrued from the above date. However, the effective date of payment of Charges shall be as defined in clauses 6.10 and 6.16.

22 NOTICE OF DEFAULT:

Notice of default given, by either Party to the other Party under this Agreement shall be in writing and shall be deemed to have been duly and properly served upon the Parties hereto if delivered by Registered mail / Courier against acknowledgement due and addressed to the signatories to this Agreement.

- 23 CORRESPONDENCE:
- 23.1 All communications from BBNL to BSNL shall be addressed to the Nodal officer nominated by BSNL in writing for the purpose of this work.
- 23.2 All communication from BSNL to BBNL shall be addressed to the Nodal Officer nominated by BBNL in writing for the purpose of this work.
- 24 Confidentiality and Non-Disclosure:
- 24.1 All parties acknowledge the confidentiality of the information, which may be exchanged between the parties from time to time as being essential to this AGREEMENT and agree not to disclose the same to any other outside party. However, each party shall be free to disclose such information as:
 - · Part of the public domain at the time of disclosure or
 - · Required to be disclosed by official authorities in accordance with the applicable laws.
- 24.2 Both the parties shall not use logos, trademarks Patent, Copyrights, Geographical and intellectual property rights of each other.
- 24.3 In case any confidential information is divulged by a party to the other party for proper implementation of the Agreement, the other party shall use its reasonable endeavor to ensure that its employees, agents, contractors and advisors do not disclose it to a third party.
- It is further agreed that from time to time, either party may make available to the other 24.4 party information of a confidential and/or proprietary nature including, but not limited to, technical and commercial information, in a written form marked as 'CONFIDENTIAL'. All confidential and/or proprietary information transmitted by one party to the other shall be treated by the receiving party with the same care as such receiving party would exercise in the handling of its own confidential and/or proprietary information, but not less than reasonable care. Such receiving party shall not disclose such confidential and/or proprietary information to any third party unless it receives the prior written consent of the disclosing party and subject to such terms and conditions as the disclosing party specifies. Upon expiry or termination of this Agreement for any reason, all such confidential and/or proprietary information of the disclosing party shall be immediately returned to the disclosing party and the limitations and undertakings specified in this clause shall remain in effect even after the date of termination or expiry of this Agreement. en SARP

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- 24.5 The above shall not apply to:
 - a. Information required to be submitted legally to any statutory or regulatory authority, provided that prior to such disclosure, the disclosing party shall inform the party of the nature and content of the disclosure being affected or
 - b. Such information is generally available to the public other than as a result of breach of this Agreement or
 - Such information is developed by the recipient, independent of any disclosure made hereunder or
 - d. Such information is already in possession of the recipient without restriction and prior to any disclosure by the other party.
- 25 Inconsistency with Law:

This Agreement is subject to statutory regulations in force & if any provision of this Agreement is inconsistent with such regulation, the agreement shall be modified accordingly. Such inconsistency is inclusive of any directions given by regulatory body/Government of India in present & in future. If any provision of this Agreement shall be held invalid, the remaining provisions hereof shall continue to be binding upon the Parties.

26 System Protection & Safety:

Each party is responsible for the safe operation of its system & shall take all reasonable and necessary steps in its operation and implementation of this Agreement & to ensure that its respective equipment and network does not endanger the safety or health of employees or contractor, agents or customer of other party, damage, interfere with or cause any deterioration in the operation of the other parties network.

27 Representations and Warranties by the Parties:

Each Party represents and warrants to the other that

- a) It is a company, duly organized and validly existing under the laws of India and has all requisite corporate power and authority to carry on its business and has full corporate power and authority to execute, deliver and implement this Agreement.
- b) The execution and delivery of this Agreement and such other Agreements and instruments and the consummation of the transactions contemplated hereby and thereby shall not (i) violate any material law, statute, rule or regulation or judgment, order, writ, injunction or decree of any court, administrative agency or governmental body, or (ii) conflict with, result in any breach of, or constitute a default (or an event which with notice or lapse of time or both would become a default) under the Memorandum of Association and Articles of Association of the respective Party, or any Agreement to which the Party is a party. No approval, authorization, consent or other order or action of or filing with any court, administrative agency or other governmental authority is required for the execution and delivery by each of the Parties of this Agreement or the consummation by such Party of the transactions contemplated hereby.
- c) There is no action, suit, proceeding or investigation pending, or threatened against or by each of the Parties relating to the subject matter of this Agreement in any court, or by or before any national, local or other governmental agency or instrumentality.

28 Miscellaneous:

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- a) No failure or delay, by either party to exercise any of its rights hereunder shall constitute a waiver of all or part of the same, unless and to the extent that such party give written confirmation that it expressly waives its rights. No waiver of rights in respect of any act or default shall affect any other rights or any future rights in respect of similar or other act or default.
- b) The Annexure-I and annexure-II shall form part and parcel of this AGREEMENT.

	SIGNED AND DELIVERED BY	SIGNED AND DELIVERED BY
	(for and on behalf of Bharat Broadband	(for and on behalf of BSNL)
	Network Limited)	
	Signature	Name PRAFUL KUMAR SIGTIA
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	Signature Name M. P. SHAMM	Name RANJAN GHOSH
	Name M. L. SHAML Designation C.S.M. (p. km.) B.B.N.L.	Name RANJAN GHOSH Designation P.SM (NOFN) Address B.S.N.L. CO. New Dumi

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Minutes of Meeting for finalising methodology to leverage the NOFN by BSNL and BBNL

A meeting was held on 08.01.2016 at 10.00 AM in the Office of Director (Enterprise), BSNL in which following were present:

- i. Shri. B.K. Mittal, Director (Operation), BBNL
- ii. Shri N.K. Mehta, Director (Enterprise), BSNL
- iii. Shri Vinod Kumar, CGM (PF-III), BBNL
- iv. Shri Anil Kumar Gupta, Sr GM(Operation & Marketing) BBNL
- v. Shri Sudhir Gupta, Addl. GM (NOFN-Plg), BSNL
- vi. Shri R.R. Yadava, DGM (NOFN-Op), BSNL

In the meeting, following in-principle understanding is being recommended:

1. BSNL shall use its existing fibre and OLTs, ONTs & new incremental fibre under NOFN for providing services in Gram Panchayat area on revenue share basis. BSNL can also use splitter at GP location for horizontal connectivity for providing these services. The revenue share shall be based on the net revenue. In case the services are offered through channel partners on revenue share basis, the revenue share between BBNL and BSNL shall be based on net revenue to BSNL and BBNL as the case may be.

 BSNL shall provide services to the Govt agencies/ institutions herein called "specified institutions" for which BSNL has specified special concessional tariff plans as under:

Plan		Download+ Upload Limit (GB)	Speed (Mbps)	Speed for unlimited usage beyond allowed limit (Kbps)
GP699	-699	10	2	512
GP999	999	20	2	512
GP1499	1499	40	4	512

- 3. BSNL can also use NOFN for providing commercial services on revenue share basis.
- BSNL shall extend all the existing infrastructure required for OLT-like Air Conditioning, Earthing, Fire Fighting arrangement and uninterrupted power.
- BSNL shall be responsible for the O&M of existing fibre and infrastructure at OLT location and BBNL shall be responsible for O&M of new fibre, O&M of OLT.
- The revenue share shall be 10:90 for the years 2015-16 & 2016-17, 20:80 for the year 2017-18 and 30:70 for subsequent years between BBNL and BSNL.

BBNL shall provide bandwidth to TSPs/ ISPs/ MSOs/ OSPs on non-discriminatory

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BBNL shall provide bandwidth to TSPs/ ISPs/ MSOs/ OSPs on non-discriminatory

Basis on its commercial tariff on NOFN including existing fibre of BSNL BSNL shall

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O&M Agreement on Revenue Sharing Model BBNL-BSNL 4th October Page 15 of 20 BBNL on BBNL FDF for which no charge would be levied by BSNL. The revenue share in this case will be in the ratio of 70:30 between BSNL and BBNL.

- Spare fibers of the NOFN will be marketed by BSNL on behalf of BBNL for which BBNL will share 20% of earned revenue to BSNL.
- BSNL is allowed to use upto 4 spare fibres under NOFN incremental OF cables for using in their network for which no O&M charges shall be paid and no revenue sharing shall be done. BBNL will give one extra fibre free of cost to BSNL for maintenance.
- 10. BBNL will pay to BSNL for the operation and maintenance of remaining NOFN incremental Fibers at the following rates per Km per Annum:

Remaining Fibres	2015-16/2016-17 (Rs)	2017-18 (Rs)	2018-19 (Rs)
23-24 F	12000	13500	15000
22 F	10500	12000	13500
21 F	9000	10500	12000
20 F	7500	9000	10500
19 F	6000	7500	9000

- 11. BSNL shall strive for restoration of fault by 20:00 hrs of next day of reporting of the fault to BSNL. Beyond that BSNL shall give rebate @ Rs. 50 per day. However, the maximum rebate shall be limited to Rs. 500/- per fault.
- Detailed agreement based on above and the draft agreement sent by BSNL shall be finalized and signed subsequently. Flowever, actions as per above will start immediately.

(B.K. Mittal); IL

(N.K. Mehta)

(Vinod Kumar)

(Anil Kumar Gurda) 16

(Sudhir Gupta)

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Fault occurrence / Reporting and Maintenance Procedure

- 1.0 Fault occurrence / Reporting and Maintenance Procedure
- BBNL has developed an NMS (network Management system) with various modules like Fibre Management System, Fault Management System, Trouble Ticketing, Provisioning, Configuration, GIS, SLA management etc. The centralized monitoring of BharatNet shall be done through NOC at Delhi/ Bengaluru.
- The BSNL users shall be given access of NMS for the purpose of fault reporting, 1.2 compliance, monitoring and data updating through web based interface and mobile app.
- On occurrence of Fault in BharatNet, the GPON system will automatically generate 1.3 alarms. In case of DCN link failure manual TT will be raised in NMS TT module.
- In the event of service affecting alarm generated / reported, the trouble ticket (TT) shall 1.4 be generated by NMS based on existing configuration & RCA and will be assigned to the concerned maintenance agency in the following manner.

SN	Maintenance Component	O&M Agency responsible for restoration of fault
1	Incremental Fibre*	BSNL (where BSNL is the EA for BharatNet project)
2	OLT Space & Infrastructure	BSNL
3	OLT / ONT- First Level	Agency responsible for First Line Maintenance
4	OLT-ONT Second Level #	Equipment Supplier
5	Existing Fibre*	BSNL (or BSNL & other CPSU) under Revenue Sharing arrangement
6	DCN	BSNL/Trimax

- The differentiation between incremental fiber and existing fiber may be possible only in certain scenarios. In other cases, the TT may be first sent to BSNL or other CPSU (configurable)
- # In many case TT will flow to second level only after receiving report from agencies / incharge of first line maintenance.
- 1.5 Every TT will be assigned a unique TT ID. For any further communication in this regards, the TTID should be quoted.
- 1.6 Fault intimation will also be sent to the Mobile via SMS / Email of users configured as per the details provided by BSNL based on their maintenance procedure. However, the fault monitoring & resolution is to be done through NMS.

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- 1.7 The operation of NMS/EMS is completely dependent on the functioning of DCN links. If the DCN link is not through or the DCN link is not working, no activities including monitoring, fault reporting, automatic TT generation, Provisioning, configuration can be carried out by NMS/EMS. Therefore BSNL shall ensure the availability of DCN links as per provision in DCN agreement.
- In the event of any DCN failure, automatic TT shall be generated from NMS which shall be sent to BSNL and to BBNL PMU/OMU. Where the DCN link is connected but OLT is unreachable due to OLT issues, the TT shall be generated by NMS/EMS and sent to First line maintenance provider, equipment supplier and PMU/OMU to ensure the reachability of OLT into NMS/EMS.
- 1.9 The trouble tickets may be viewed through NMS web interface or mobile app. The same may also be notified to the assigned nodal maintenance officer(s) by SMS/e-mail. Data for mapping of TTs to the locations (fault jurisdiction), escalation levels including mobile, e-mail IDs is pre-requisite and will be provided by BSNL for configuration in NMS.
- 1.10 BSNL shall localize and repair the fault. Once the problem is resolved/ the fault is attended, the automatically generated trouble tickets will move to 'Resolved' state automatically. Manual tickets can be resolved either directly in NMS application through web or by calling BBNL NOC. BSNL shall ensure the fault compliance after restoration work and NOC to ensure the restoration of the network before closing the TT in case of manual TT.
- 1.11 BSNL shall restore faults as per SLA finalized between BSNL and BBNL. SLA shall be calculated for the duration between the opening & closing the docket. Penalties/ Rebates on non-compliance of SLAs to be taken in account.
- 1.12 The trouble ticket (TT) can be closed directly or after TT owner enters the remarks / reason for faults as per configuration (only resolved tickets can be closed) for all types of faults except fiber related faults.
- 1.13 An automatically generated TT cannot be closed if the underlying fault (responsible for creation of TT) is not cleared. However, the MTTR for SLA defaulters shall be calculated based on individual contributions to it.
- 1.14 For fiber related faults, the NMS application will ask for the confirmation regarding the update of fiber related information in GIS. The GIS information including fault reason and section related data may be validated with GIS team separately. In case of a new joint, the information of latitudes and longitudes of the joint(s) to be updated/ mapped in the in Geo Information System (GIS) through web based access.
- 1.15 SLA shall be calculated for as per agreement with the maintenance agencies. In case of more than one parties involved in restoration of link, the overall MTTR can be bifurcated accordingly. This may be done by passing on the TTs from first party to second party through NOC.

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- 1.16 Any planned/preventive maintenance activity should only be taken up after prior intimation to BBNL NOC and approval of BBNL PMU.
- 1.17 For fiber related RCA, it is mandatory to have the fiber data entry done in NMS/GIS. The FMS module in NMS has provision of entry of complete fiber data including Lat/Long of all locations including router locators and splitter/joints etc.
- 1.18 BSNL shall provide customer support over telephone/SMS/e-mail for BharatNet complaints.
- 2.0 Technical and Maintenance Support:
- 2,1 BSNL shall provide sufficient maintenance infrastructure/teams as may be essential to meet out Service Level Agreement (SLA).
- 2.2 The Technical Support Centre (s) shall work as maintenance center(s) and shall be responsible for restoring of the faulty fiber segments and shall also maintain a requisite minimum stock of cable joints closures, OF cables and accessories, patch cords etc required to maintain fiber segments under its jurisdiction, so that the Service Level Agreement conditions are met at all times.
- 2.3 BBNL shall provide web based NMS access with necessary rights to Support Centre staff as well as the officers to whom the complaint is to be escalated in BSNL. BSNL shall intimate Addresses, Phone number, email/FAX Number and the maintenancepersonnel of the support centers as well as those to whom the complaint is to be escalated, in writing to BBNL.
- 3 Work Flow for Fault occurrence, reporting and Troubleshooting:

The work flow is designed with the fault occurrence and three reporting scenario as given below:

- a) Automatic Alarms update in NMS / NOC through DCN.
- b) Manual Fault registration with known fault.
- c) Manual Fault registration with unknown fault.

Workflows for above given Scenarios (a,b and c) are depicted as below:

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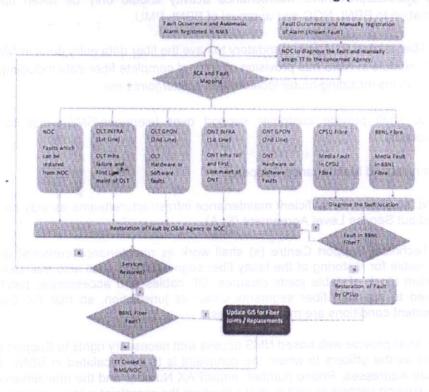
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Work Flow for Fault occurrence and Troubleshooting (Scenario - a& b)



Work Flow for Fault occurrence and Troubleshooting (Scenario -c)

Manually outage reported at ONT Location by calling NOC / Customer Care

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General Manager

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