Bharat Sanchar Nigam Limited

(A Government of India Enterprise)

Notice No. ND/NCNGN/MVNO/2016

1. **Subject**: Invitation of Expression of Interest (EOI) for empanelment of Virtual Network Enablers (VNEs) for providing various services to Virtual Network Operators (VNOs) who are keen to launch telecom services with BSNL as the Telecom Service Provider (TSP) in India.

2. Introduction

- a) BSNL is planning to onboard several VNOs (Virtual Network Operator) who are interested in launching the Telecom services in India. To expedite the go to market process, BSNL is planning to choose VNE (Virtual Network Enabler) partners to enable launch of VNOs in India.
- b) In order to onboard VNOs onto BSNL's Network, BSNL is looking for a VNE (Virtual Network Enabler) partner who could setup the VNE (Virtual Network Enabler) Infrastructure and support BSNL in offering VNO services to various VNOs across the country.
- c) BSNL's VNE (Virtual Network Enabler) partner can enable a VNO (Virtual Network Operator) in one or more of the Service Areas or in a pan-India basis.
- d) BSNL's VNE (Virtual Network Enabler) partner can enable a VNO(Virtual Network Operator) with one or more or all of the services listed in UL(VNO) License guidelines document para 3 (ii) dated 31st May 2016 (No.800-23/2011-VAS(Vol. II)) released by the Government of India.

3. Eligibility Conditions

The VNE is required to meet the following criteria and submit documentary proof as under along with their response:

a) Indian Companies who are registered/incorporated in India are eligible to participate in the EOI. The following eligibility criterion shall be met by the VNE who intend to apply for empanelment through this EOI.

i. General

- a) The VNE shall be a company registered & incorporated under the Indian Companies Act, 1956 or under Indian Companies Act, 2013.
- b) Each VNE is allowed to submit only one bid.
- c) The Company and its parent or holding company or its Directors shall not be black listed or facing any legal enquiry in any part of the world. Self undertaking to be given by the VNE.

ii. Financial

a) The VNE shall be a corporate entity duly incorporated in India under the Indian Companies Act, 1956 or under Indian Companies Act 2013 and engaged in the business of providing

Dated: 02/11/2016

- technology services or telecom solutions. (Copies of MOU, Article of Association, Certificate of incorporation to be submitted).
- b) The VNE shall have a valid CST/State VAT/TIN registration certificate. (Copies of relevant tax/registration certificates to be submitted).
- c) The VNE shall have minimum annual sales turnover of above INR 25 Crores during last three years (2013-2014, 2014-2015, 2015-2016). In case of an Indian subsidiary, the turnover of the parent company or the holding company of the parent Company shall also be taken into considerations for this condition.

iii. Experience

- a) The VNE shall have implemented end-to-end VNE solution which has a complete suite of Network Core, OSS, BSS (as defined in annexure-III) shall have integrated with at least two (2) Telecom operators in at least two different countries to offer VNO services.VNE has to submit Certificates from NSOs.
- b) The VNE has successfully deployed the end to end MVNO/VNO platform to host more than one VNO at the time of applying for this EOI. VNE has to submit Certificates from NSOs.
- c) The VNE shall have a VNE platform which supports Multi-Tenancy, Multi-MNO Interconnects, Multi-Lingual, capability. Self certificate is required from VNE.
- d) The VNE shall have integrated with a minimum of 10VNOs/MVNOs across the world.VNE has to submit Certificates from NSOs or copies of commercial agreements between VNE and VNO is required.
- e) The VNE shall have activated at least 1 million subscribers with at least 0.5 million active subscribers at the time of applying for this EOI. VNE has to submit Certificates from NSOs.

4. Scope of Work

- a) The VNE infrastructure shall support the services as listed in UL (VNO) License guidelines dated 31st May 2016 (No.800-23/2011-VAS (Vol II)) released by the Government of India.
- b) The VNE Infrastructure shall be a logically exclusive platform for BSNL, hosted optionally in BSNL Data Center (in which case VNE has to give commercials to BSNL). BSNL shall extend the required connectivity to the VNE Platform.

5. Proposed Solution Architecture-

- a. Solution Architecture (As per Annexure-I).
- b. Solution Integration with BSNL Network (As per Annexure-II).
- c. Suggested VNE Platform Features / Functionalities (As per Annexure-III).

Roles and Responsibilities

6. Roles and Responsibilities of the VNE

- a) VNE shall be responsible for installing the VNE Platform within India.
- b) The deployment shall support Disaster Recovery (within India) to ensure 99% availability. Location of Main & DR site to be indicated.
- c) The VNE platform deployed shall be capable of supporting VNOs across the country.

- d) VNE shall be responsible for integrating the VNE platform with BSNL's Network. VNE shall provide a single point of contact to coordinate with the BSNL for all integration related issues.
- e) VNE shall be responsible for complete OAM (Operations Administration and maintenance) of the VNE platform on a day to day basis. This includes making any configuration changes on the VNE platform as it may be required by VNO from time to time
- f) VNE shall be responsible for Lawful Intercept if the equipment capable of interception, or the information needed for Law Enforcement agencies falls within the scope of VNO.
- g) VNE shall be responsible for providing all needed platform related technical support for VNOs who are on the VNE platform.

7. Roles and Responsibilities of BSNL

- a) BSNL shall be responsible for providing the needed connectivity from its Circuit Switching Network as the need be.
- b) BSNL shall be responsible for providing the needed interfaces from its Packet Core Network for VNE's Packet core integration
- c) BSNL shall be responsible for providing the needed interfaces from its Broadband Network for VNE integration (Subject to technical feasibility).
- d) BSNL shall provide a single point of contact with VNE for all integration issues.
- e) BSNL shall be responsible for providing only Legal interceptions such as Live Streaming and Fan Out as per the VNO policy published by the Government of India or if the equipment capable of interception is with BSNL. However VNO shall be responsible for fulfilling other requirement of law enforcement agencies and national security related issues under its control supported by VNE Systems.
- f) BSNL shall provide Data Center/Co-location facilities if sought by VNE Platform provider at commercial rates.

8. Process for empanelling VNEs

- a) The proposal shall be submitted by VNE signed by authorized signatory. Board resolution from Board of Directors in favour of Authorized Signatory is required. This would include a self-certification that the VNE meets the eligibility criterion listed for a VNE before submitting this application.
- b) After scrutinizing the document submitted by VNEs, VNE may be called for a Technical presentation which will include discussions on eligibility criterion, technical capabilities, future planning and road map for executing the services along with BSNL as NSO/TSP.
- c) VNE shall possess all required approvals, licenses, permits etc. and will be responsible for compliance of the applicable laws/Rules/instructions etc. and the VNE shall be totally bound and obliged to comply with all applicable norms and directions issued from time to time by the regulator (TRAI) or the licensor (DoT) or Govt. of India and any new condition/direction/amendment/stipulation which may be brought in force by the regulator/licensor/Govt. of India subsequent to the empanelment, all such conditions/ directions/amendments/stipulations shall be deemed to be automatically included in this policy of empanelment.

9. Process of selecting a VNE for empanelment

- a) Company shall submit all below mentioned documents along with the application
 - i. Attested copy of the certificate of Incorporation.
 - ii. Articles and Memorandum of Association or partnership deed as the case may be.
 - iii. The company shall need to provide the service's Network Architecture (interface and protocols) with diagram. It shall also submit detailed integration requirement document with BSNL system.
 - iv. Certificates of roll out of VNO
 - v. Certificate that applicant meet all clauses of this EOI
- b) BSNL reserves the right to have a presentation on the company's proposal as part of the evaluation process.
- c) VNE to sign a Non-Disclosure Agreement (NDA) with BSNL to protect the interests of BSNL.
- d) Empanelment Fee: The VNE will pay 5 Lakh INR as empanelment fee. Empanelment fee is non-refundable even if no work is allocated to empanelled VNE.
- e) Submission of EMD, PBG: The VNE shall submit Performance Bank Guarantee (PBG) of 10 Lakhs (Ten Lakhs) issued by any scheduled bank in favour of BSNL at the time of on-boarding the first VNO.
- f) Penalty: If the VNE fails to fulfil their obligations expressed in this document, BSNL will
 - i. Debarring the VNE
 - ii. Encash the PBG

10.Agreement

- a) Whenever work is awarded to an empanelled VNE or financial commitment appear necessary to the parties, the parties shall enter into specific agreement (s) providing definite financial arrangements, detailed terms & obligations, including inter-alia, the following terms:
 - Submission of EMD, PBG: The VNE shall submit Performance Bank Guarantee (PBG) of 10 Lakhs (Ten Lakhs) issued by any scheduled bank in favour of BSNL at the time of onboarding the first VNO.
 - II. Penalty: If the VNE fails to fulfil their obligations expressed in this document, BSNL will
 - i. Debarring the VNE
 - ii. Encash the PBG
 - III. Selected VNE shall set up the required technical setup and integrate it with BSNL network within 6 months from the date of signing of the agreement with VNE. A Joint team of BSNL & VNE may verify the technical capabilities of the platform installed by VNE.
 - IV. In case of failure of technical setup installed by VNE, extension may be provided to VNE but extension (i.e. total time period) shall not be more than 12 months from the date of signing of the agreement with VNE. After 12 months timeline no extension shall be provided and the agreement with VNE may be considered for cancellation.

- b) Other terms will be agreed at the time of signing of the agreement by the parties in addition to the terms of EOI.
- c) The validity of such Agreement shall be 10 years which may be extended or curtailed based on the commercial agreements with the VNOs and the performance of individual organization. However performance will be reviewed after every 2 years subject to periodicity of DoT guidelines.
- d) This Agreement is non-exclusive and nothing in this Agreement will be construed to prevent either Party from entering into a similar Agreement with any other Party or to restrict such Party from directly engaging in related activities.
- e) The entire cost associated with setting up the VNE infrastructure shall be borne by the VNE.
- f) Renewal of empanelment- Agreement for empanelment with VNE shall be renewed by BSNL based on their performance. In case of non-performance, their agreement for empanelment shall not be renewed further. Terms & conditions of renewal shall be defined at the time of renewal.

11.Terms and Conditions

- a) This policy is open-ended and any qualifying company which is interested and meets the eligibility condition may submit its proposal on any working day. BSNL further reserves the right of periodic review of the entire policy or any element thereof based on its business needs.
- b) This EOI shall not be treated as a commercial tender document and VNEs are advised not to offer any price or include any financial aspect with their response.
- c) This EOI does not constitute and will not be deemed to constitute any commitment or confirmation on part of BSNL for any empanelment or agreement with the VNEs.
- d) The VNE shall bear all cost associated with the preparation and submission of its response to this EOI including cost of demo/presentation for the purpose of clarification of the offer if so desired by BSNL. BSNL will in no case by responsible for these costs regardless of the conduct or outcome of the EOI process.
- e) The VNE shall submit a declaration that they are ready to undertake a pilot project at his own cost if so desired by BSNL.
- f) Due diligence shall be exercised while providing information against the EOI. Unnecessary or irrelevant information will not give any advantage to the VNE. Only relevant and precise information shall be provided. If any information provided by the VNE is found to be incorrect at any stage it would render his or her bid liable for rejection.
- g) While this EOI has been prepared in good faith neither BSNL nor its employees make any representation or warranty, express or implied or accept any responsibility or liability whatsoever in respect of any statement or omission herein or the accuracy, completeness or reliability of information and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this EOI even if any loss or damage is caused by any act or omission on their part.
- h) EOI document duly completed and signed by the authorised signatory of the VNE shall be submitted in a sealed cover super scribing "EOI for empanelment of VNEs".

- i) Selected VNE shall set up the required technical setup and integrate it with BSNL network within 6 months from the date of signing of the agreement with VNE. A Joint team of BSNL & VNE may verify the technical capabilities of the platform installed by VNE.
- j) In case of failure of technical setup installed by VNE, extension may be provided to VNE but extension (i.e. total time period) shall not be more than 12 months from the date of signing of the agreement with VNE. After 12 months timeline no extension shall be provided and the agreement with VNE may be considered for cancellation.
- k) Eligible VNEs who are willing to work with BSNL on non-exclusive basis and may kindly send their EOI in line with the aforesaid requirements to:

Chief General Manager (NGNGN)
Bharat Sanchar Nigam Limited
CTS Compound, New Delhi-110023

12. Arbitration Clause:

- a. Except as otherwise provided elsewhere in the contract, In the event of any disputes, controversy, or differences arising out of or relating to this agreement, or the breach, termination or invalidity thereof between the parties, such party or parties shall make a request to the other party or parties to amicably settle such differences or disputes and parties shall thereupon make every effort to settle the same amicably within a period of 60 (sixty) days from the date of making such request.
- b. Where parties are unable to settle the disputes through conciliation, the same shall be referred to the authority in BSNL (CMD/CGM/GMTD, as the case may be) for referral of such disputes to a sole arbitrator (chosen from the name(s) provided by BSNL), to be mutually decided by the parties, as per the provisions of the Arbitration and Conciliation Act, 1996, any amendment thereof, and any notification issued or rules made there under from time to time.
- c. The venue of the arbitration proceedings shall be New Delhi/or Circle/SSA HQ (as the case may be).

ANNEXURE- I

Solution Architecture

- a. All the offered solution shall be carrier grade with no single point of failure
- b. The offered VNE Platform shall be extendable to support Disaster Recovery (DR) to handle services during emergency/crisis situations.
- c. The offered VNE platform shall be highly modular enabling VNOs to choose the components as required for the solution
- d. The VNE shall be capable of supporting wide range VNO business models.
- e. The architecture shall support Multiple connectivity options to MNO
- f. The architecture shall support integration with MNP & Lawful intercept systems
- g. The offered VNE platform shall handle all charging, rating, discounting and credit management requirements
- h. The offered VNE platform shall handle all CRM, provisioning, subscription, billing requirements
- i. The offered VNE platform shall handle reporting presentation including Business Analytics (Business Intelligence) to MVNO/ VNO
- j. The offered MVNE shall handles all number portability procedures (MNP routing, provisioning)-internal MNP routing needed for ON-NET and OFF NET charging between MVNO
- k. The VNE shall provide Revenue Assurance and Fraud Management platform to all the VNOs hosted by the VNE platform.
- I. The listed requirements are indicative and not exhaustive.

ANNEXURE-II

Solution Integration with BSNL Network

- a. The offered VNE Platform shall be capable of integrating with BSNL's Circuit/Packet Switching /IN Network MSC/GMSC/STP) over standard interfaces.
- b. The proposed solution shall be capable of integrating with BSNL's Packet Core Network
- c. The proposed solution shall be capable of integrating with BSNL's Broadband Network
- d. The offered VNE Platform GGSN/PGW shall support integration with BSNL SGSN/SGW over industry standard interfaces

ANNEXURE-III

Suggested VNE Platform Features / Functionalities (Applicant VNE may indicate supported features as on date)

- a) The offered VNE Platform shall support
 - i. Multi-Tenancy
 - ii. Multi-Country
 - iii. Multi-Lingual
 - iv. Multi-Currency

b) Pre-Integrated Modules: In order to support BSNL's goal of faster time to market and reduced network integration hassles, the offered VNE Platform may comprise of the below listed pre-integrated modules as the case may be.

i. Network Core:

- a. Service Control Point (SCP)
- b. Home Location Register(HLR)/HSS
- c. SMSC
- d. MMSC
- e. USSD
- f. IVR
- g. Voice Mail
- h. AAA Radius/Diameter
- i. GGSN/PGW
- j. PCRF
- k. Deep Packet Inspection (DPI)

ii. OSS:

- a. Alarm Management
- b. Performance Management
- c. Inventory Management
- d. Trouble Ticketing
- e. Reporting

iii. Customer Management:

- a. Provisioning System
- b. Self Care
- c. Customer Care
- d. Dealer Care
- e. Product Management
- f. Channel Management
- g. Content Management
- h. Voucher Management
- i. OCS
- j. Billing
- k. Invoicing
- I. Payments
- m. Asset Management
- n. Loyalty & Promotions

iv. VAS (not limited to):

- a. Location Based Services
- b. Missed Call Alert
- c. Ring Back Tone
- d. Call me Back Service
- e. Mobile Commerce and Remittance
- f. Mobile Advertisement

g. Roaming Services

v. Other Network Elements

- a. BTS, BSC, MSC, RSU DSLAM, LAN Switches
- c) The offered solution shall be a VNE-in-a-box kind of solution enabling complete Turnkey deployment.
- d) The proposed solution shall include Network Core, OSS, BSS, VAS components all in one single solution.
- e) The proposed Solution shall support 2G, 2.5G, 3G & 4G LTE mobile technologies.

ANNEXURE-IV: EOI APPLICATION

Expression of Interest to be an empanelled VNE for Virtual Network Operator Service on BSNL

Dated: 02/11/2016

Notice No. ND/NCNGN/MVNO/2016

Letter of Application (on Company's letter head) (To be submitted with EOI Application by Applicant)

To,

CGM NGNGN, CTS Compound, Netaji Nagar, New Delhi -110023

Sub: Submission of Expression of Interest (EoI) for Virtual Network Enabler Service with BSNL as the wholesale TSP

Sir,

With reference to the above invitation for Expression of Interest (EoI), we have examined and understood the instructions, terms and conditions provided in EoI. We hereby enclose our Application in the prescribed format as mentioned in EoI along with along with all required documents.

We confirm that we agree with the instructions, terms and conditions provided in the EoI. The undersigned declares that the statements made and the information provided in the duly completed application are complete, true, and correct in very detail.

We also understand that BSNL is not bound to accept the offer either in part or in full. If BSNL rejects the offer in full or in part, it may do so without assigning any reasons thereof.

Yours faithfully,

Authorized Signatory (Name & Designation, seal of the firm) Date:
Place:

ANNEXURE-V

Empanelment Agreement

Agreement with M/S	_ for offering v	VINE services to VIN	O when BSML is	s the w	noiesaie
NSO/ TSP in the engagement					
This agreement is signed on the dat	by ar	by and between BHARAT SANCHAR			
NIGAM LIMITED, a company register	red under the	Companies Act, 19	56, having its r	egister	ed office
at Bharat Sanchar Bhawan, Harish Ch	handra Mathur	Lane, Janpath, Ne	w Delhi 110001	acting	through
the C.G.M. NGNGN, New Delhi -11	.0023 (herein a	after called BSNL	which expression	on shal	l, unless
repugnant to the context, include its	s successors in	business, adminis	trators, liquidat	ors and	d assigns
or legal representatives) of the FIRST	PARTY		•		_
AND					
	, a compan	v registered under	the Companie	es Act,	1956 or
2013, having	its .	,	•	·	at:
,		J		cting	through
	e authorized	signatory (herein		•	Ŭ
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NIGAM LIMITED, a company register at Bharat Sanchar Bhawan, Harish Change the C.G.M. NGNGN, New Delhi -11 repugnant to the context, include its or legal representatives) of the FIRST AND AND having	red under the handra Mathur .0023 (herein as successors in PARTY, a companits e authorized of the context in	Companies Act, 19 Lane, Janpath, Ne after called BSNL business, adminis y registered under registered signatory (herein	56, having its r w Delhi 110001 which expression trators, liquidat the Companie office after called a ors in business,	egistere Lacting on shal cors and es Act, acting as VNE	ed office through I, unless d assigns 1956 or at: through) which

WHEREAS

- 1. BSNL is a telecom service provide licensed to provide various kinds of telecom services within India
- 2. BSNL is desirous of appointing Virtual Network Enablers (VNEs) to help engage Virtual Network Operators (VNOs) with BSNL as the host NSO.
- 3. The Virtual Network Enabler (VNE) has met all the qualification criterion and is now hereby empanelled as a VNE to BSNL. As a result, VNE would sign an empanelment agreement with BSNL ahead of establishing a technical interconnect with BSNL.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS

- 1. In consideration of the due observance and performance of all the terms and conditions mentioned in this agreement along with the EOI terms and conditions issued vide No. ND/NCNGN/MVNO/2016 dated 02/11/2016 which are part and parcel of this agreement
- 2. VNE confirms the compliance to all the terms and conditions to the terms of the EOI throughout the course of the agreement and not just at the time of applying for this EOI. If VNE is in breach of any the terms after the agreement is signed, BSNL reserves the right to terminate the agreement and void the empanelment provided to the chosen VNE.
- 3. This agreement shall be valid for a period of Ten (10) years from the date of signing unless revoked earlier. Further extensions will be considered as per the provisions of VNE EOI prevalent at that point in time

- 4. Both VNE and BSNL hereby agree unequivocally and undertake to fully comply with all the terms and conditions stipulated in the agreement without any deviation or reservations of any kind unless mutually agreed between the parties at any given time
- 5. The laws of the land as promulgated/ modified/ amended or replaced from time to time shall govern the agreement.
- 6. This is a mutually non-exclusive agreement. Both the parties reserve their right to sign with more than one party at any given time
- 7. The agreement shall not be amended or modified or altered or changed in any form except in writing and duly executed by the authorized representative of each party
- 8. BSNL reserves the right to empanel any number of such VNEs to provide such similar services from time to time in future without any restriction on the number or the nature of the VNEs. VNE shall have no objection whatsoever. VNE agrees to adherence to this provision and the same as material obligation of this agreement
- 9. All the terms and conditions as mentioned in the EOI for vide No. ND/NCNGN/MVNO/2016 dated 02/11/2016 is valid and forms part of the agreement.

In witness whereof the parties hereto have caused this agree respective authorized representatives on the date of			
Signature On behalf of BSNL	Signature On behalf of VNE		
Name: Designation: Location: Date:	Name: Designation: Location: Date:		
In the presence of the following witnesses			
Name:	Name:		
Occupation:	Occupation:		
Service:	Service:		
Address:	Address:		
Place:	Place:		
Date:	Date:		