



Telecom Regulatory Authority of India



Consultation Paper

on

Review of Terms and Conditions for registration of

Other Service Providers (OSPs)

29th March, 2019

Mahanagar Door Sanchar Bhawan
Jawahar Lal Nehru Marg,
New Delhi- 110 002
Website: www.trai.gov.in

Stakeholders are requested to furnish their Comments to the Principal Advisor (Network, Spectrum & Licensing), TRAI by 29.04.2019. Counter Comments, if any, may be sent by 13.05.2019. Comments and Counter Comments would be posted on TRAI's website www.trai.gov.in. The comments in electronic form may be sent by e-mail to div.nsl1@traigov.in or ja.nsl1@traigov.in. For any clarification/ information, Shri U. K. Srivastava, Principal Advisor (NSL) may be contacted at Tel. No. +91-11-23233291 Fax: +91-11-23230056.

CONTENTS

Chapter No.	Item	Page No.
I	Introduction	1
II	Overview of Current Regulatory Regime for OSP	5
III	Network elements in OSP Setup	12
IV	Issues for Consultation	19
V	Summary of Issues for Consultation	44
VI	Annexure	48
VI	List of Acronyms	52

Chapter –I

Introduction

A- Introduction

- 1.1 Known for their expertise, Indian IT, ITES and BPO companies have carved out a great niche for themselves in the global IT market. Various factors which contribute to the boom of the outsourcing industry in India are high-end infrastructure, low labor cost, language and educational system, regulatory environment, financial structure and strict adherence to international standards of quality assurance. Global giants are successfully implementing the outsourcing policy and hence gaining competitive edge over their counterparts by investing in Indian IT companies.
- 1.2 According to NASSCOM TechSci Research, the IT-BPM sector in India expanded at a CAGR of 13.7% over 2010–16, which is 3–4 times higher than the global IT-BPM growth, and is estimated to expand at a CAGR of 9.1% to USD350 billion by 2025. Further, India Hiring Intent Survey conducted by NASSCOM shows that employment from BPO/ITeS sector reached 3.86 million in 2016-17. India’s IT industry contributes around 7.7 per cent to the country’s GDP.
- 1.3 Looking at the current market scenario and recognizing the numerous opportunities in the IT domain, the Indian government is investing more in the IT-ITeS sector in order to create a sustainable future. The India BPO promotion scheme was approved under Digital India programme which aims to create employment opportunities for the youth and promote investments in the IT & ITeS industry.
- 1.4 Thus, over the years, India has become a preferred outsourcing destination for IT companies across the world.¹Having proven its

¹International Science Congress Association | BPO World: An Analysis of the Emergence of BPO Industry in India

capabilities in delivering both on-shore and off-shore services to global clients, emerging technologies now offer an entire new gamut of opportunities for top IT firms in India.

- 1.5 The Telecom Policy issued by the Department of Telecommunications (DoT) in 1999 viz. New Telecom Policy, 1999 (NTP99) under its framework, emphasized to focus on creating an environment, which enables continued attraction of investment in the sector and allows creation of communication infrastructure by leveraging on technological development. Under this framework, a new category of telecom service sector 'Other Service Providers' (OSP) was defined as below:

“For applications like tele-banking, tele-medicine, tele-education, tele-trading, e-commerce, other service providers will be allowed to operate by using infrastructure provided by various access providers. No licence fee will be charged but registration for specific services being offered will be required. These service providers will not infringe on the jurisdiction of other access providers and they will not provide switched telephony.”

- 1.6 The Telecom Commission in May 1999, accorded in principle approval² for registration of Call Centers, both International and Domestic, in the country under the above category. Later, services like Network Operation Centers and Vehicle Tracking Systems were also added to this category. As per the Terms and Conditions formulated by the Telecom Commission in February 2000, these Application Service Providers could take telecom resources from authorized Telecom Service Providers only and will not infringe upon the jurisdiction of other authorized Telecom Service Providers and will not provide switched telephony. The DoT charges a processing fee of Rs.1000/- per case for registration under OSP category.

² <http://www.dot.gov.in/relatedlinks/registration-under-other-service-providers-osp-category>

- 1.7 The terms and conditions for registration of OSPs were revised by DoT on 5th August, 2008 liberalizing the existing terms and conditions. The revised terms and conditions included definitions of various terms including the terms “Application Service” and OSP, process and documents required for OSP registration, technical conditions for domestic and international OSP centre, terms and conditions for sharing the infrastructure between international and domestic OSP and security conditions. Thereafter, from time to time amendments to these terms and conditions were issued. The amendments broadly included the terms and conditions related to work from home, sharing of EPABX, use of Closed User Group (CUG), allowing of Limited Liability Partnership (LLP) etc.
- 1.8 Initially, the registration of OSPs was done at DoT Headquarters only. Later, it was de-centralized in two phases to the respective Vigilance and Telecom Monitoring (VTM) Cells (which were later renamed as TERM Cells and presently known as Licensed Service Area (LSA) field units of DoT).
- 1.9 In view of the vast changes in technology and evolution of different networking architectures and solutions for setting up of OSP network and evolution of new user applications and service delivery scenarios, a need has been felt by DoT to review the technical, financial and regulatory requirements, scope of operations and the terms and conditions of registrations of OSPs in a comprehensive and holistic manner. Further, it has been desired by DoT to devise a technology neutral framework so as to promote innovations for setting up the OSP service delivery platform in the most cost efficient manner for faster promotion of OSPs in the country. In view of above, DoT has sought the recommendations of TRAI under Section 11(1)(a) of the TRAI Act, 1997 vide their letter dated 10th September 2018. (Annexure-I). It has been mentioned that during the review of the terms and conditions, it is essential to ensure that the security aspects are guarded in national

interest and there is no infringement of the scope of the licenses of the Telecom Service Providers (TSPs).

- 1.10 The present Consultation Paper aims to obtain comments of the stakeholders on review of the existing terms and conditions for registration of the OSPs. The Chapter I discuss about the background and existing terms and conditions for the registration of the OSPs. The Chapter II of this Consultation Paper deals with the current regulatory provisions for OSP. The Chapter III deals with the network elements in OSP set up and the Chapter IV deals with the analysis of the present regulatory framework along with the issues for consultation.

Chapter-II

Overview of Current Regulatory Regime for OSP

A- Background

- 2.1 The Telecom Commission introduced the Other Service Providers Category in May 1999 under the New Telecom Policy (NTP) to provide services such as tele-banking, tele-trading, e-commerce etc by using infrastructure provided by various authorized access providers for non telecom services. The Telecom Commission, accorded in-principle approval for registration of Call Centers, both International and Domestic, in the country under the above category. Later, services like Network Operation Centers and Vehicle Tracking Systems were also added. As per the Terms and Conditions formulated by the Telecom Commission in February 2000, these Application Service Providers could take telecom resources from authorized Telecom Service Providers, however, they would not provide switched telephony. The Department of Telecommunication (DoT) will charge a processing fee of Rs. 1000/- per case where the companies should meet the revised terms and conditions of OSP registration. From its inception, over 2500 cases have been registered under OSP category till date.
- 2.2 The registration of OSP was initially required essentially for the purpose of :
- a. statistical information
 - b. ensuring that their activities do not infringe upon the jurisdiction of other access providers.
 - c. providing special dispensation to boost the BPO sector.
- 2.3 In the constant endeavor of the Government to usher in policy decisions that could facilitate better telecommunications to the people as per NTP 1999, the Government decided to decentralize the registration of call centers (Domestic and International) under the 'Other Service Providers' (OSP) category and the Telemarketers under

'Telemarketing' category from the Department of Telecom (headquarters) to the respective Vigilance Telecom Monitoring (VTM) Cells of 10 circles in the first phase w.e.f. 01.09.2007. After successful completion of first phase, it was decided to decentralize OSP/Telemarketing further to all VTM/TERM Cells (presently known as DoT LSA units) w.e.f. 01.06.2008.

2.4 TRAI issued the "Telecom Commercial Communications Customer Preference Regulations 2010" on 01.12.2010. These Regulations provided detailed procedure regulating the Unsolicited Commercial Communication wherein detailed procedure for subscribers to register themselves for receiving or stopping commercial communications by Telemarketers was provided. These Regulations also provided that all the Telemarketers should register themselves with the Authority. In view of these Regulations, vide letter dated 03.02.2011, DoT notified all the TERM Cells to stop telemarketer's registration with immediate effect.

2.5 The Department of Telecommunication issued detailed terms and conditions for Other Service Providers (OSP) category vide letter dated 05.08.2008. The general requirements of terms and conditions of registration include:

1. The OSPs will not infringe on the jurisdiction of other authorized Telecom Service Providers (TSP) and they will not provide switched telephony.
2. A processing fee of Rs. 1000/- would be payable along with the application for registration in the form of a demand draft from a scheduled bank in favor of the concerned Accounts Officer of registering authority.
3. The validity of the registration shall be 20 years from the date of issue, unless otherwise mentioned in the registration letter. The validity of the registration may be extended, if deemed expedient, the period of registration by 10 years at one time,

upon request of the OSP, if made during the 19th year of the registration period on the terms mutually agreed.

4. The authorized Telecom Service Providers shall provide resources to the OSP after examining the network diagram of the network proposed to be setup by the OSP and after ensuring its bonafide use.
5. OSPs are allowed to have internet connectivity from the authorized internet service provider.

2.6 According to the 2008 guidelines, the OSPs can be divided into three different categories:

Domestic OSP: means the OSP providing the Application Services within national boundaries.

International OSP: means the OSP providing the Application Services beyond national boundaries.

Hot sites: means a standby OSP Centre either of the same company or of the third party duly registered with DoT, which is continuously updated and is ready to take over the operations of the OSP centers in case of any natural disaster or system failure.

It is to be noted that the OSPs are permitted to share telecom bandwidth with the other activities of the same company or group of companies while ensuring that there will be a logical separation between the telecom resources for OSP and the telecom resources for other activities. There shall be no voice/non voice traffic flow between them. Interconnectivity of international OSP with Domestic OSP is not permitted.

2.7 Sharing of infrastructure between international OSP and Domestic OSP was an important provision in the 2008 guidelines for OSPs. Two options were proposed, which are as follows:

Option I: Separate and independent EPABX to be used for international and domestic OSP centers with sharing of same operator position.

Option II: international and domestic OSP centers to share the common EPABX with logical partitioning.

The registration for sharing the infrastructure is valid for 3 years and the company shall submit a bank guarantee of Rs. 50 Lakhs per OSP center for option 1 and Rs. 1 crore per OSP center for option 2.

- 2.8 The Year 2008 guidelines also provisioned the concept of Extended Agent Position (Work from Home), in which the OSP was required to submit a Bank Guarantee of Rs. 5 crore with an agreement envisaging to meet certain obligations like exclusive use of home agent, all responsibility to be borne by OSP, etc.
- 2.9 Amendments to these terms and conditions have been issued by DoT from time to time vide the circulars/letters given below :
1. No. 18-1/2009-CS-I dated 25.02.2009
 2. No. 18-2/2009-CS-I dated 22.05.2009
 3. No. 18-5/2009-CS-I dated 07.10.2011
 4. No. 18-5/2012-CS-I dated 21.11.2012
 5. No. 18-5/2009-CS-I dated 12.01.2016
 6. No. 18-2/2009-CS-I dated 13.01.2017
- 2.10 With reference to the provision of taking telecom resources from authorized TSPs only, vide letter dated 25.02.2009 it was clarified that use of Foreign VoIP Minutes by OSPs is not permissible.
- 2.11 Subsequently, in the amendment dated 22.05.2009, the Bank Guarantee for Work From Home facility was reduced from Rs. 5 Crore to Rs. 1 crore.
- 2.12 As per the amendment dated 07.10.2011, the following facilities were provided to the OSPs:

- a. OSPs were allowed to share the EPABX of International Call Centres (ICC) and PSTN lines for office use with logical partitioning.
- b. Restriction on limiting the Extended Agent Positions to SSA & adjoining SSAs was removed.

2.13 As per the amendment dated 21.11.2012, the following facilities were extended to the OSPs :

- 1. OSPs may have a distributed architecture of EPABX (main EPABX at a centralized location and media gateways at individual OSP centres) for their OSP centers across India.
- 2. The OSPs would also be able to use the Closed User group (CUG) facility for their internal communication needs.

2.14 As per the amendment dated 12.01.2016, the following provisions were incorporated in the OSP registration policy:

- a. Limited Liability Partnership (LLP) Firms registered under LLP Act 2008 were included in the current OSP registration policy for registration under OSP category.
- b. Companies registered under Indian Companies Act -2013, as amended from time to time, were also entitled for registration under OSP category in addition to the companies registered under Indian Companies Act - 1956.

2.15 Through the letter dated 13.01.2017, it was communicated that amount due and payable by the OSPs/LLPs/applicants of OSP registration shall be paid to through digital payments.

Provisions in Unified License Agreement relevant for OSP Registration:

2.16 In the Unified License Agreement, different annexures have been provided wherein the terms and conditions of authorization for specific services have been provided. The Chapter VIII of Unified License Agreement is on Access Services, Chapter IX is on Internet Service and Chapter XVI is on Resale of IPLC. Specific clauses of these authorizations provide nature of use of certain type of telecom resources which are part of OSP network. The specific clauses of these authorizations are reproduced below:

Clause 2.1(a)(v) of the Scope of Access Service Authorization under Unified License (Chapter VIII):

(v) The Licensee may provide leased circuits within its respective service area. Interconnection of leased circuits, whether point to point or in CUG network, with PSTN/PLMN/GMPCS/Internet Telephony Network is not permitted.

Clause 4.2 & 7.5 of the 'Internet Service' Authorization under Unified License (Chapter IX):

4.2 The Licensee shall have no connectivity with PSTN/PLMN/GMPCS networks in the country.

7.5 Periodical inspections are to be carried out at the premises of ILL customers to check possible misuse and possible interconnection of Internet leased line with PSTN, PLMN, GMPCS network. First inspection at the premises of the customer must be done within 15 days of commissioning of Internet leased line.

Clause 2(i) of the 'Resale of IPLC' Authorization under Unified License (Chapter XVI):

(i) Interconnection of IPLC with PSTN/PLMN/GMPCS/Internet Telephony Network is not permitted.

- 2.17 The above conditions are part of the agreement signed by the Telecom Service Providers who are authorized to provide telecom resources to the OSPs. The concerned TSP is required to ensure the compliance of these conditions in the OSP network. For this purpose, the OSP is required to get their network diagram verified by the respective TSP from whom the telecom resources are being obtained at the time of registration with DoT. The TSP can also inspect the OSP network to ensure compliance of these conditions.
- 2.18 The above paras indicate the terms and conditions of registration of OSP which are required to be followed by them, including the respective clauses on telecom resources for OSPs in the Unified License governing the TSPs in regard to resources provided by them to OSPs.
- 2.19 In the recent past, with the development of technology, a new type of entity have evolved providing infrastructure services to OSPs, known as Contact Centre Service Providers (CCSP) or Hosted Contact Centre Service Providers (HCCSP), who offer various resources for setting up of a call centre on almost instant basis. Though, these entities host the infrastructure for OSPs, they are at present not covered under any specific regulatory framework.

Chapter – III

Network Elements in OSP Setup

- 3.1 An OSP establish necessary infrastructure to meet the specific service delivery requirement. The services offered by OSP Centre can be broadly categorized in two categories viz.
- (a) The OSP centre which primarily handles voice calls to/from its clients/ customers who connect to the OSP through their telephones (PSTN/PLMN based).
 - (b) The OSP center where the setup is used for basically data traffic and voice calls, if any, is limited to the employees of OSP either at the same location or across other locations. This could be software development outsourcing or interconnecting various offices of one organization through Closed User Group.
- 3.2 A call center may handle either only inbound or outbound calls or might deal with a combination of the two. An inbound call center is one that predominately handles inbound calls (calls initiated by the customer). An outbound call center is the exact opposite of an inbound call center. Instead of receiving calls, agents in an outbound call center make calls.
- 3.3 In case of an inbound Call Centre, the calls from customers over PSTN/PLMN network are collected at a location over a publicized contact number. This call is then carried by the OSP using the resources obtained from an authorized TSP to the designated location of the OSP from where service is provided to the customers.
- 3.4 In case of an outbound call centre, the call is generated by an agent from the OSP centre which is then taken to the customer using separate PSTN resource obtained for this purpose from a TSP.

3.5 The typical Domestic Call Center and International Call Center OSP having centralized PBX in India scenarios are as below:-

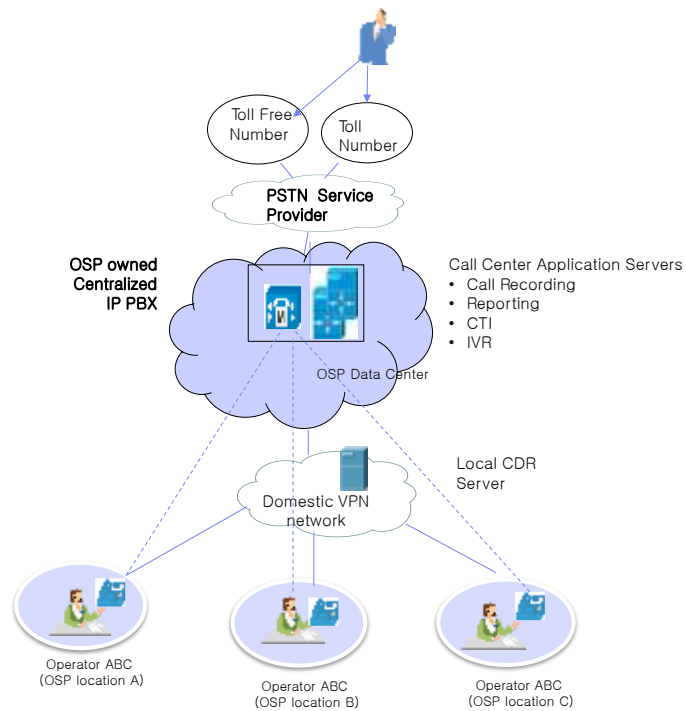


Figure-1: Typical Domestic OSP Setup (OSP owned centralized IP PBX)

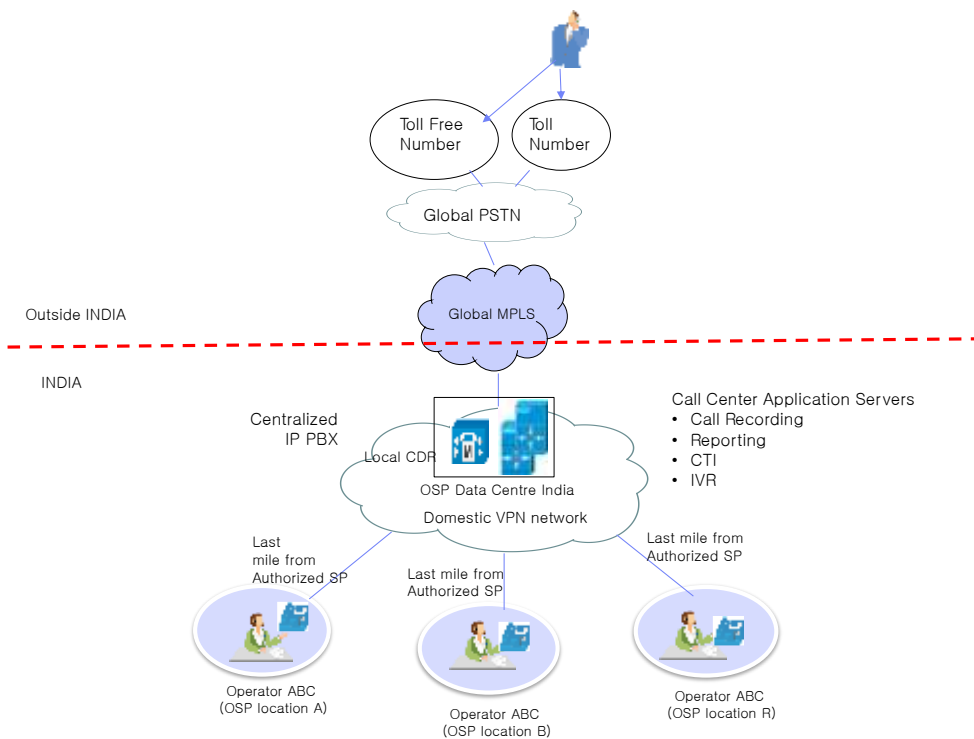


Figure-2: Typical International Call Center having centralized IP PBX in India

OSP Setup

3.6 In any OSP Setup, the telecom resources provided by Telecom Service Providers include telephone connectivity, internet bandwidth, point to point domestic leased lines using MPLS/ SDH/ VSAT by NLD and UAS providers / point to point international leased lines using MPLS services/ IPLC provided by ILD providers. In addition, OSP setup requires placing calls (internal as well as external), answering them and distributing the calls to other users. For this purpose, OSPs utilize EPABX for calls within or outside OSP centre.

3.7 The key network elements of the OSP are explained below :

a. Leased Line: A leased line is a private dedicated bidirectional telecommunication circuit/link provided between two geographically spread out fixed locations for exclusive use of the customer. It is a dedicated point to point line connecting the telecom facilities of a Customer. The TSPs provide SDH based leased line for specific bandwidth required for connecting two locations. The bandwidth for within a Licensed Service Area (LSA) connectivity is provided by Access Service Providers and for connectivity across LSAs is provided by NLD Service Providers.

b. MPLS: Multi-Protocol Label Switching is a protocol-agnostic routing technique designed to speed up and shape traffic flows across enterprise wide area and service provider networks. It is a data-carrying mechanism. Data packets are assigned labels in an MPLS network. Instead of examining the packet itself, packet-forwarding decisions are made based purely on the contents of this label. At every point a new label is attached to the packet to tell the router what has to be done with the packet until it reaches the destination. By using any protocol, it allows the creation of end-to-end circuits across all types of transport mediums. It is an efficient alternative to traditional IP routing, which requires each router to independently determine a packet's next hop by inspecting the packet's destination IP address

before consulting its own routing table. This process consumes time and hardware resources, potentially resulting in degraded performance for real-time applications such as voice and video.

- c. IPLC:** International Private Leased Circuit/ leased line is dedicated private point-to-point lines that are geographically dispersed throughout the world. The service provider provides a symmetric telecommunication line/leased line that can be used for exchange of data/voice traffic. The main benefits of leased lines are that they are private, so the security level is higher along with speed, reliability, and resilience. The International leased circuit is provided under ILD License.
- d. Internet Leased Line (ILL):** Internet Lease Lines are dedicated leased line for the purpose of Internet access and are generally offered by Internet Gateway Service Providers holding an ISP licensee. These ILL services are offered either to Enterprise to connect their Local Area Networks (LANs) to the internet by point to point leased lines or to ISPs who do not have their own International Gateway facilities, so as to provide them access to International Internet Backbone abroad. Internet Leased Lines offer same speed for both uploads and downloads (symmetric connectivity) and are more reliable. Internet Leased Lines offer better QoS (Quality of Service) and it is more effective to run convergent services like voice, video etc. over Internet Leased Lines.
- e. PABX:** Private Automatic Branch exchange (PABX) is an in-house telephone switching system which makes connections among the internal telephones of a private organization (or an enterprise) and also connects them to the public telecom network via various interfaces. Generally, the PABX is owned and operated by the enterprise rather than the Telecom Service Provider. Initially, Private branch exchanges used analog technology. Today, PABX use digital technology or IP

technology supporting IP terminals known as IP-PBX. The options available to OSPs to establish network are EPABX, IP-PABX, IP-PABX with distributed, Soft PABX, Soft-PABX with distributed network architecture. The OSPs has the options to either own the various elements comprising PABX or fully/partly outsourced the PABX. It is summarized as below:-

(i) **EPABX** – The PABX working on circuit switching based technology are called EPABX or Electronic Private Automatic Branch Exchange. It can be deployed in either on-premise architecture where each site has its own dedicated PABX. Alternatively, it can be deployed in distributed architecture with central unit at one node and is accessed over leased line/ MPLS etc. by other nodes.

(ii) **IP-PABX** – The PABX working on IP (internet protocol) based technology or packet based switching are known as IP-BABX. The IP PABX can be provided through dedicated hardware or emulated using software over servers. While for a conventional EPABX, separate networks are necessary for voice and data communications; one of the main advantages of an IP PABX is the fact that it employs converged data and voice networks. This means that Internet access, as well as VoIP communications and traditional telephone communications, are all possible using a single line to each user. This provides flexibility as an enterprise grows and can also reduce long-term operation and maintenance costs. Like a traditional EPABX, an IP PABX is owned by the enterprise. Similar to EPABX, IP PABX can also be deployed in on-premise or distributed architecture including virtual or cloud PABX.

Contact Centre Service Providers (CCSPs)

3.8 The OSPs in order to avail the benefits of advancement in technology at economical cost, scalability and time to deploy, can outsource the PABX (also on sharing basis)/ can have Hosted Contact Centre by various CCSP. The Hosted Contact Center is a network-based contact center service, where the service provider hosts the contact center infrastructure and leases out functionalities, applications and features to end-users. The functionalities provided to the customer are:

- i. Inbound/outbound call centre
- ii. IVR system
- iii. Auto dialer/predictive dialer
- iv. Network routing services
- v. Do not call list management
- vi. Call recording
- vii. Multimedia services/email/ web chat
- viii. Network management and reporting services
- ix. Agent reports/ lead management / campaign results, etc

3.9 In a hosted PABX model the business simply connects IP phones, desktop and/or mobile soft phones to their network, which then connects via IP to the hosted provider who delivers all of the PABX features directly to the business from the cloud. This centralized and professionally managed service offloads IT responsibility from the business while delivering advanced telecommunication services.

3.10 Hosted PABX has many advantages compared to traditional systems. Since the user is free from the hassles of maintaining the equipments, the system is also called virtual phone PABX system. These systems deliver PABX functionality 'as a service', available over the service provider's core network or the Internet. Hosted PABXs are typically provided by a telephone company or service provider, using equipment located in the premises of a telephone exchange or the provider's data

center. This means the customer does not need to buy or install PABX equipment.

- 3.11 Generally the service is provided by a lease agreement and the provider can, in some configurations, use the same switching equipment to service multiple hosted PABX customers. It is possible to get hosted PABX services that include feature sets from minimal functionality to advanced feature combinations. Hosted PABX is also known as Cloud PABX. In addition to the features available from premises-based PABX systems, hosted-PABX allows a single number for the entire company, despite it being geographically distributed. It also allows scalability; in case company's employee base grows, more lines can be demanded and at the same time if it reduces the lines can be withdrawn. Thus, allowing company to avoid expenditure on PABX which would otherwise become wasteful, if the number of employees is reduced.
- 3.12 Cloud based PABX system is made independent of location. The data servers in cloud based PABX can be located anywhere in the World. In domestic call centre, data servers have to be located anywhere in India and it cannot be located outside India. Also, in cloud-based PABX, incoming and outgoing call is done through Conference Bridge which fall under the domain of access service license. The data regarding tenant table, CDR, command log etc. are handled first at CCSP and then transferred to OSP.

Chapter-IV

Issues for Consultation

4.1 This Chapter presents an analysis of the present regulatory framework for Other Service Providers in the country and raises issues for consultation with the stakeholders.

(1) Definition of OSP :

4.2 The definition of Other Service Provider as given in the Year 2008 guidelines of DoT, is as follows:

“Other Service Provider” (OSP) means a company providing Application Services wherein

“Applications Services” means providing services like tele-banking, tele-medicine, tele-education, tele-trading, e-commerce, call centre, network operation center and other IT Enabled Services by using Telecom Resources provided by authorized telecom service providers.

4.3 Today, when the technology is advancing at such a rapid pace, the scope of the terms such as ‘other IT enabled services’ has widened. The above definition of OSP includes a very broad and subjective view of application services, prone to different interpretations in the current scenario.

4.4 From above, it is seen that the scope of ‘Application Services’ defined under OSP category is quite broad. Further, there is no differentiation provided therein to distinguish whether the services are for captive use or for a customer/ other company. This makes the scope of OSP very wide covering almost all the IT based services falling under the definitions of OSP.

4.5 It may be noted that the purpose of registration of OSP considered by DoT has been:

(a) statistical information,

(b) ensuring that their activities do not infringe upon the jurisdiction of other access providers and

(c) providing special dispensation to boost the BPO sector.

4.6 By the special dispensation provided under OSP registration, OSPs are permitted to transport the incoming PSTN calls from one location to the other to enable them to provide IT enabled services in an effective and efficient manner.

4.7 To meet the purpose of statistical information there should not be any restriction on the way the telecom resources should be used. However, to ensure that the activities of OSPs do not infringe upon the jurisdiction of the licensed Telecom Service Providers which is quite possible because of advancement of technology, certain restrictions could be required. Also, while any infringement should not be allowed, the terms and conditions should not be restricting on taking advantage of advancement of technologies in terms of reduction in cost/ advancement of features in the services provided by the OSPs.

4.8 Therefore, in view of the purpose of registration specified by DoT, the view of stakeholders are sought on:

Q1. Please provide your views on the definition of the Application Service in context of OSP. Whether, the Application Services which are purely based on data/ internet should be covered under Application Service for the purpose of defining OSP.

Q2. Whether registration of OSP should be continued or any other regulatory framework should be adopted for OSPs so that the purpose of registration specified by government is met. Please furnish your views with justification.

(2) Validity period of registration of OSPs

4.9 As outlined in Chapter-II, the validity of registration of OSPs is 20 years from the date of issue, unless otherwise mentioned in the registration letter. Further, the validity of the registration may be extended by 10 years at one time, upon request of the OSP, if made during the 19th year of the registration period on the terms mutually agreed.

4.10 The views of the stakeholders are sought on:

Q3. What should be the period of validity of OSP registration? Further, what should be validity period for the renewal of OSP registration?

(3) Documents required for OSP Registration

4.11 At present following documents are required for registration of OSP.

(A)Mandatory Documents

(1)Certificate of Incorporation issued by Registrar of Companies

(2)Memorandum & Article of Association

(3) Resolution of The Board of Directors or duly notarised Power of Attorney authorizing the authorised signatory with attested signatures.

(4)A note on the nature of business / activities of the proposed OSP

(B)Documents required to be submitted, if actual information is different from mandatory documents

(5)List of present Directors of the Company with name and address/
List of present Designated partners and all the partners of the LLP

(6)Present shareholding pattern of the company indicating equity details (Indian Equity and Foreign Equity)/ present shareholding pattern of the LLP indicating equity/ contribution details of all the partners (Indian equity and Foreign equity)

(C) Documents required for sharing of infrastructure/ Work from Home

(7) Vendor Certificate for logical partitioning in the EPABX being shared in case of Sharing the EPABX of International Call Centre (ICC) Domestic OSP Centres and /or PSTN Lines with logical partitioning.

(8) Undertaking that the Bank Guarantee of Rs. 50 Lakhs in the prescribed format would be submitted at the time of signing the agreement (In case of option of separate & independent EPABX to be used for International & domestic OSP Centers with sharing of same operator position.)

(9) Undertaking that the Bank Guarantee of Rs. One Crore in the prescribed format would be submitted at the time of signing the agreement. (In case of option of Sharing the EPABX of International Call Centre (ICC) Domestic OSP Centres and /or PSTN Lines with logical partitioning.)

(10) Undertaking that the Bank Guarantee of Rs. One Crore in the prescribed format would be submitted at the time of signing the agreement. (In case of option of Work from Home).

(D) Proof of Processing Fees (of Rs. 1000/- for each OSP Centre) paid through digital payments like e-transfers/NEFT/RTGS/ Debit Card/ Credit Card as per process given in the user guide.

(E) Network diagram – the OSP must clearly mention in the diagram whether it is using Sharing of Infrastructure or Centralised EPABX architecture or the CUG facility. Any change in the network is also required to be intimated immediately by the OSP without any delay).

All the documents must be certified with seal by either Company Secretary or one of the Directors of the Company or Statutory Auditors or Public Notary in case of Company.

All the documents must be certified with seal by either designated partners or all the partners or statutory auditors or public notary in case of LLP.

The LLP firm shall intimate to the Department within 30 days, if there is any change in the designated partners, authorized signatory, and/or Agreement of LLP.

4.12 From the above list, the documents under heading (B) and (C) are to be submitted only in specific cases mentioned therein. The documents under heading (A), the proof of payment (D) and network diagram as detailed under heading (E) are mandatory in all the cases. Further, the documents submitted are to be certified by either Company Secretary or one of the Directors of the Company or Statutory Auditors or Public Notary in case of Company and by either designated partners or all the partners or statutory auditors or public notary in case of LLP.

Q4. Do you agree that the documents listed above are adequate to meet the information requirements for OSP registration? If not, please state the documents which should be added or removed along with justification for the same.

(4) Registration Fees

4.13 The application registration fee prescribed at the rate of Rs. 1000/- per OSP centre has been nominal. One OSP centre appears to be one site of OSP at one location in a particular city. An OSP is free to have more than one site in any city / LSA.

Q5: Do you agree with the fee of Rs. 1000/- for registration of each OSP center. If not, please suggest suitable fee with justification.

(5) Registration of OSP for multiple locations:

4.14 The registration is location specific i.e. an OSP centre is registered for a specific location. Further, if a company / LLP has more than one OSP centers, then each OSP center is required to be registered with the respective DoT LSA unit having geographical jurisdiction. Any change in the location of OSP Centre requires amendment in the original registration. Further any change in the network diagram requires to be intimated immediately.

4.15 In case of multiple registrations, after getting the registration certificate for the first location, the OSP can apply to other respective DoT LSA office for remaining sites. In such cases, the OSP has to submit only copy of OSP Registration obtained for first site and a copy of certificate of incorporation issued by Registrar of Companies, if such request is made by OSP within one year and there is no change in the status of previously submitted documents. After one year a complete set of documents shall be required to be submitted.

Q6: Do you agree with the existing procedure of OSP registration for single/ multiple OSP centres? If not, please suggest suitable changes with justification.

(6) Requirement to furnish Annual Return

4.16 The OSP is required to submit 'Annual Return' to the registering authority in the prescribed Performa within six months of completion of the financial year, indicating the details of the activities of the previous financial year and the status of their continuing the OSP operation. The operational OSPs shall be put in the Active OSP list. Those OSPs who are not submitting the annual return for consecutive three years shall be put in the dormant list and their registration will be cancelled after keeping them for two years in the dormant list. Such list would be made available on the DoT web site.

Q7: Do you agree with the existing provisions of determination of dormant OSPs and cancellation of their registration? If not, please suggest suitable changes with justification.

(7) Technical Conditions for OSP Registration

4.17 The OSP is mandated to take Telecom Resources from an authorized TSP only. The authorized TSP is required to provide telecom resources to the OSP after examining the network diagram of the network proposed to be set up by OSP and after ensuring its bonafide use. The copy of network diagram approved by the TSP is required to be submitted by the OSP to DoT LSA unit for verification and records. Both the Authorized TSP and OSP are responsible towards any violation of terms of conditions of License and registration respectively.

4.18 OSP is permitted to share the Telecom bandwidth with other activities of the same Company / LLP or group of companies. However, the OSP shall ensure that there will be a logical separation between the Telecom Resources for OSP and the Telecom Resources for their other activities. There shall be no voice / non voice traffic flow between them.

4.19 Interconnection of the International OSP with Domestic OSP is not permitted.

Q8. Do you agree with the terms and conditions related to network diagram and network resources in the OSP guidelines? If not, please suggest suitable changes with justification.

4.20 An OSP is permitted to have internet connectivity from the authorized Internet Service Provider. For the purpose of Internet connectivity in India, the OSPs are permitted to use IP address that is registered in the name of an Indian Entity that shall be traceable to a physical address (location) in India. Internet connectivity and IP addresses pertaining to any location outside India is not permitted.

4.21 As per the License condition for Internet Service, the ISP is not authorized to provide VPN/ Closed User Group to its subscribers. Therefore, the OSP is required to get the Internet connection for each OSP center separately, as per requirement.

Q9. Do you agree with the provisions of internet connectivity to OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

(8) Provisions related to Hot Sites for Disaster Management

4.22 The domestic OSPs are permitted to connect to the dedicated servers provided at the registered 'Hot Sites', only at the time of disaster with due intimation to the DoT giving connectivity details. Similar arrangements are permitted to the International OSP also.

4.23 OSP Centres of the same Company / LLP (both domestic & International) are permitted to cross map the seats for use during disaster with due intimation to the DoT.

4.24 However, any interconnection between the 'Hot Sites' of domestic OSP and International OSP is not permitted.

Q10. Do you agree with the provisions related to Hot Sites for disaster management mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

(9) Terms and Conditions specific to the Domestic OSP

4.25 Domestic OSP is permitted to terminate PSTN/PLMN connection with outgoing facility on the same EPABX provided that such PSTN/PLMN lines shall be used for making calls through normal NLD network only and in no way directly or indirectly cause bypass of licensed National Long Distance Operator (NLDO) jurisdiction. There shall be a logical

partitioning to ensure the separation of these facilities. They may have other connectivity e.g. Lease Circuit and Virtual Private Network (VPN) at the same centre, however, there shall not be any call flow between these PSTN lines and Leased lines.

4.26 Interconnectivity of two or more Domestic OSP Centres of the same Company / LLP or group of companies is permitted.

4.27 Domestic OSP is permitted to use Integrated Services Digital Network (ISDN) connections only for the purpose of back up of domestic leased circuits.

Q11. Do you agree with the provisions of logical separation of PSTN and PLMN network resources with that of leased line/ VPN resources for domestic OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

(10) Terms and Conditions specific to International OSP

4.28 No PSTN connectivity is permitted to the International OSP at the Indian end. PSTN connectivity on foreign end is permitted having facility of both inbound and outbound calls. Further, interconnection of two or more International OSP of the same Company / LLP or the group companies is permitted, with intimation to the registering authority within 15 days of such interconnection.

Q12. Do you agree with the provisions of PSTN connectivity/ interconnection of International OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

(11) Provision for monitoring and security mechanism

4.29 The terms and conditions for OSP registration were initially issued considering that the EPABX and related resources would be placed at

the OSP centre. This allowed easy access and monitoring of the utilization of resources as and when required. With the advancement of technology and change in business need, OSPs prefer to keep minimum infrastructure required for running the services in their premises.

4.30 Generally data centres are preferred outside destination for aggregation such infrastructure / resources. Main reasons for such set ups may include:

(a) Cost effectiveness as the expertise required for maintaining such resources are available at data centres. Hence, there is no necessity for maintaining exclusive manpower for such activities which may not justify full time personnel.

(b) Better reliability due to uninterrupted power supply and dedicated manpower with expertise available for maintaining them at data centers.

(c) In a multi OSP environment pooling of resources at one place allow efficient utilization of common resources.

4.31 In the recent past there is a trend in shifting EPABX also to such locations outside OSP premises. It is also seen that telecom resources like PRIs / Internet are availed at outside OSP location and then extended to the actual OSP location where agents are seated for operational requirement.

4.32 In such a situation where the infrastructure for OSP (Data Centre/ PABX /telecom resources) are placed outside the OSP center, the inspection of such infrastructure to check the compliance of terms and conditions of OSP registration would be difficult. In cases where these infrastructures are shared with other OSPs it becomes a complex scenario to check the compliance of terms and conditions.

Q13. Please provide your views as to how the compliance of terms and conditions may be ensured including security compliance in case the OSP centre and other resources (data centre, PABX, telecom resources) of OSP are at different locations.

4.33 New scenarios of OSP centre, where new OSP is required to be set up as extended arm of an existing OSP centre are also being reported. In this case, all the resources of an existing OSP centre are proposed to be used and no new telecom resources are required to be installed. This may be due to the reason that the physical space at the existing location may not be sufficient for further expansion. Other reasons may be due to some business exclusivity need or efficient utilization of existing telecom resources.

Q14. Please provide your views whether extended OSP of existing registered OSP may be allowed without any additional telecom resource. If yes, then what should be the geographical limitation for the extended OSP centre; same building/ same campus/ same city?

Q15. Please provide your views as to how the compliance of terms and conditions may be ensured including security compliance in case of the extended OSP centre.

(12) Sharing of Infrastructure between International and Domestic OSP

General Conditions:

4.34 Sharing of infrastructure by the domestic OSP and International OSP is permitted with prior approval of DoT subject to the condition that they belong to the same company/ LLP. In addition, OSP should set up a call centre having at least 50 seats. The OSP would be responsible for any violation of the terms and conditions of registration by anyone including but not limited to its employees.

4.35 The registration for sharing is valid for an initial period of 3 years from the effective date, unless revoked, extendable for a further period of maximum 3 years. The OSP is required to submit a bank guarantee of Rs. 50 lakh for Option – 1 and Rs. 1 Crore for Option – 2 (option 1 & 2 defined in technical conditions), in addition to signing an agreement in the prescribed format.

4.36 For extension of sharing registration beyond 3 years, a request along with extended validity period of bank guarantee is required to be submitted at least 60 days prior to the expiry date of registration for sharing.

Q16. Do you agree with the provisions of general conditions for sharing of infrastructure between International OSP and Domestic OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

(12.1) Technical Conditions:

4.37 The Technical conditions for sharing of infrastructure by the domestic OSP and International OSP are categorized under two options.

(A) Option – 1: Separate & Independent EPABX to be used for International & Domestic OSP Centres with sharing of same operator position

Under this option only the operator position is shared. There is no interconnection between the EPABX used for domestic and international OSP and they are kept separate and independent. The OSP is required to ensure that one operator position is offered either incoming or outgoing call at a time irrespective of domestic or international.

No voice traffic flow between domestic and international OSP centers is permitted and the OSP is required to ensure that there is no bypass of the network of authorized TSPs in case of NLD / ILD calls. For audit purposes, OSP is required to ensure that the system logs are tamper proof and are preserved for at-least six months.

(B) Option – 2: Sharing the EPABX of International Call Centre (ICC), Domestic OSP Centres and PSTN lines for office use with logical partitioning

For sharing of the EPABX of the International and domestic OSP, there should be complete logical separation between the activities of the domestic OSP, International OSP Centre and PSTN lines for office use. Logical separation should be such that no voice or data traffic shall flow among the Domestic / International OSP centers and PSTN lines for offices use and no bypass of the network of the Authorized Telecom Service Providers shall be caused. OSP shall certify before using the EPABX sharing facility that the logical partitioning as per the OSP Registration has been implemented and shall remain implemented.

In this regard, the OSP is required to submit a certificate from the Vendors of the equipment that the software is capable of logically bifurcating the common infrastructure into two / three (as applicable) separate and independent environments for the Domestic OSP Centre, International OSP Centers and PSTN lines for office use. The certificate is required to be deposited with the concerned DoT LSA unit. Further, OSP is required to ensure that the system logs are tamper-proof and system logs are preserved at least for one Year. The usages records (Call Detail records and Usages Data Records) are required to be maintained for a period of one year. The OSP is also required to provide the CDRs and UDRs thus saved/stored to the Security agencies/DoT as and when demanded.

Q17. Do you agree with the provisions of Technical Conditions under option -1 & 2 for sharing of infrastructure between International OSP and Domestic OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

(12.2) Open source EPABX or distributed architecture of EPABXs (main EPABX at a centralized location and media gateways at individual OSP centres)

4.38 The terms and conditions of OSP registration were amended on 21.11.2012 permitting use of distributed architecture of EPABX (main EPABX at a centralized location and media gateways at individual OSP centers) for their OSP centers across India. The OSPs using distributed architecture of EPABX are required to carry out call-restrictions, logical tenant-partitioning etc. from the central EPABX. The media gateway/PBX at the remote ends are required to maintain a copy of configurations pertaining to logical separation and keep it updated a predefined periodicity.

4.39 The CDRs for all the Voice Traffic carried by EPABX is required to be segregated for each media gateway and preserved for at least one year. The time stamp in the CDR should be synchronized with Indian Standard Time and it should be possible to view the CDR data alongwith the details of the agent managing the position by remote login to CDR machine/ server.

4.40 The log of all command(s) relevant for implementation of partitioning / call-routing should be non-erasable & non-editable and would be kept by the OSP in the EPABX Server/Media-Gateway for a minimum period of one year.

4.41 List of commands (command-set) for the Central EPABX/ Server/ Media Gateway(s) along with their application and functional details are

required to be submitted to the concerned DoT LSA unit. Any subsequent change later on in this command-set is also required to be intimated within a week of its implementation to the concerned DoT LSA Unit.

- 4.42 A schematic diagram depicting the authorisations and call-flow permitted at remote location and the partition/access table duly signed by the authorised signatory shall be submitted to the DoT LSA Unit. This shall include the details of barred access for remote location. Any subsequent change later on in the schematic is also required to be intimated to the DoT LSA Unit within one week of its implementation. A copy of this shall be maintained at the OSP location.

(12.3) Monitoring of compliances in case of distributed architecture of EPABX

- 4.43 The following accessibility/tests are required to be extended to the DoT LSA unit in which OSP Centre is registered :-
- (a) Unhindered access to the premises and the system(s) for checking compliance to the terms & conditions of the OSP Registration.
 - (b) Login facility from a management terminal of Server/Media-Gateway hosted in OSP Centre to view, inter-alia, the ROUTING / partition-table /CDRs and to check “call-trace” in the EPABX for extension(s).
 - (c) Making test call from any extension to any extension /PSTN number and tracing such a call to check if all routing restrictions are being followed.
 - (d) Further, in respect of the “Centralised EPABX Locations”, the TERM Cell in whose jurisdiction it falls, shall also have unhindered access. For checking any of the points mentioned above for not only for the central location but also for other/remote locations.
 - (e) Further, for ensuring effective monitoring of such networks having distributed EPABX, apart from the DoT unit in whose jurisdiction

the OSP Center is located and the DoT unit in whose jurisdiction the “Centralised EPABX” is placed, may carry out periodic checks on the respective EPABX location(s) of the OSP.

Q18. In case of distributed network of OSP, please comment about the geographical limit i.e. city, LSA, country, if any, should be imposed. In case, no geographical limit is imposed, the provisions required to be ensure compliance of security conditions and avoid infringement to scope of authorized TSPs.

Q19. Do you agree with the provisions including of logical partitioning mentioned in the OSP guidelines for distributed architecture of EPABX? If not, please suggest suitable changes with justification.

Q20. Do you agree with the monitoring provisions of mentioned in the OSP guidelines for distributed architecture of EPABX? If not, please suggest suitable changes with justification.

(12.4) Provision of Call Centre Facilities by Call/ Contact Centre Service Provider (CCSP)/ Hosted Contact Centre Service Providers (HCCSP)

4.44 There are Service Providers who have set up Data Centers/ Facilities for providing the infrastructure required for setting up of a Call Centre/ Contact Centre instantly. These service providers (CCSP/ HCCSP) and their infrastructure are explained in Chapter III.

4.45 The various models of service offering by CCSPs are providing a PABX which controls voice calls between PABX extensions and the customers calling/ called by the OSP centre. The technology used for Voice switching may be circuit switched or Packet switched. The PABX may be a single network element or distributed in various network elements either on a dedicated hardware, distributed dedicated hardware or emulated through software on servers. Irrespective of technology used,

the basic service rendered to the OSPs/ used by OSPs is the voice switching.

4.46 In case of infrastructure provided by CCSP, there is dual control in operation of call centre type of services partly in the hands of CCSPs and partly in hands of OSPs. CCSPs, which are not regulated as on date and therefore are not obliged to comply with the terms and conditions applicable to OSPs, actually control partition tables, that are heart of all operations of such networks and only some part of data is administered by OSPs. This may lead to manipulation of networks by CCSPs without the knowledge of OSPs. Even periodical inspection of OSPs cannot help in identifying activities related to violation of terms and conditions.

Q21. Please comment on the scope of services under CCSP/HCCSP, checks required / conditions imposed on the CCSP/ HCCSP including regulating under any license/ registration so that the full potential of the technology available could be exploited for both domestic and international OSP, and there is no infringement of the scope of services of authorized TSPs.

(13) Interconnection of Data Path and Voice Path in Domestic Operations:

4.47 In case of Domestic OSP, a separation is required to be maintained between PSTN lines and leased circuits to ensure that there is no call flow between them. The domestic OSPs may require to have internet leased lines and NLD leased lines / VPN circuits terminated on the same network where PSTN is terminated and EPABX is connected. To comply the separation of data and voice path, the OSP may be willing to deploy logical partitioning. However, it is noted by DoT that monitoring of

logical partitioning / separation of voice and data path is a challenging task.

4.48 There may also be requirement of connectivity of EPABX with leased line for O&M of EPABX. In this case also the monitoring of usage of leased line with EPABX would be a challenging task.

Q22. Please provide your comments on monitoring of compliance in case interconnection of data and voice path is allowed for domestic operations.

(14) Use of Closed User Group (CUG) for internal communication of the OSP Company / LLP

4.49 Under this arrangement, a corporate extension number calling from City 'A' is able to access the extension of other City 'B' or City 'C'. This is commonly termed as Closed User Group (CUG), meant for internal communication of the company / LLP. The interconnectivity of the call-centers is permitted for the same company or same group of companies. Further, the OSPs are permitted to use CUG facility for their Internal Communication needs subject to following conditions to be fulfilled by OSP:-

- a. PSTN/PLMN/Internet telephony network is not to be connected with CUG network. There should be no bypass of NLD/ILD while making PSTN/PLMN calls. The EPABX extensions are allowed to call any national or international number (without bypass of NLD/ILD) through the PSTN/PLMN lines terminated in the EPABX which has logical partitioning for CUG. [i.e CUG extension in City A shall use the PSTN/PLMN network connectivity only of the Licensed Service Area (LSA) encompassing the City 'A' and not of any other LSA for making or receiving calls to/from PSTN/PLMN].
- b. For availing this facility, the necessary accessibility/tests as enumerated for distributed architecture of EPABX, mentioned in

above section are also required to be extended to the DoT LSA units.

- c. The OSPs not using the sharing of infrastructure (sharing of EPABX or sharing of operator or Centralised EPABX architecture) are also allowed to use the CUG facility.

Q23. Do you agree with the provisions for use of CUG for internal communications of OSP as mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

Q24. Do you agree with the monitoring provisions for use of CUG for internal communications of OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

(15) Provisions required to be made to enable 'Work from Home' to OSPs and the restrictions thereupon, if any.

4.50 The agent at home is treated as Extended Agent Position of the call centre and interconnection is permitted through authorized service providers provisioned (secured) VPN (PPVPN) which have pre-defined locations i.e. home of the agent and the OSP centre as VPN end user sites. Over and above PPVPN, the OSP may use their own security mechanism like Authentication, Authorization and Accounting at the same call centre from which the connectivity has been extended to the home agent. A security deposit of Rs. 1 Crore for each registered location of OSP centre from which Work from Home is extended is required.

4.51 For obtaining the permission for work from home, the OSP is required to submit complete details for extended agent positions like name and complete address, connectivity alongwith the name of the service provider etc. as per the application form. All logs of the activities carried out by the extended agent should be maintained for 1 year. The IP

addressed assigned on the VPN and the OSP centre in this regard should also be maintained for each extended agent position and should be produced whenever required by DoT. The Authority shall have the right to carry out periodic/surprise inspection of such establishments.

4.52 Registration for such facility shall be valid for a period of 3 years. This may be extended for a further period of maximum 3 years after expiry.

Q25. Do you agree with the provisions of 'Work from Home' mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

(16) Domestic Operations by International OSP

4.53 Some of the OSPs are requesting to DoT for allowing the service to domestic customer of their client using International OSP resources availed by them.

4.54 In such an arrangement, for in-bound calls, customers in India will be extended with service through an International Toll Free number. Calls will be taken to a foreign destination and from there these calls will come back through their foreign PoP. For out-bound calls, the domestic customers receiving a service call from such OSPs will get CLI of an international number, even though the call is originated from India.

4.55 Presently, such companies are advised to register for domestic OSP centres for serving their domestic customers. Domestic OSP registration for such operations necessitates having separate resources. Else OSP will have to resort to sharing of resources with submission of Bank Guarantee, as applicable. These options may not be cost effective, if the volume of transactions for these two segments of clients separately is not adequate.

Q26. Whether domestic operations by International OSPs for serving their customers in India may be allowed? If yes, please suggest suitable

terms and conditions to ensure that the scope of authorized TSP is not infringed and security requirements are met.

(17) Use of Foreign EPABX for International Call Centre

4.56 International OSPs may require to use EPABX in foreign land for their OSP operations in India. With the amendments in 2012, stipulating requirement of unhindered access to LSA Field units in whose jurisdiction the centralized EPABX location falls, location of EPABX is being considered as one of the parameters for deciding about approval for registration by DoT.

4.57 Companies with global foot prints will have to locate their centralized EPABX in one of the countries depending on various factors. Insistence by every country to have EPABX in their country cannot be met with centralized architecture. Additional EPABX just for meeting the country's regulatory requirement will lead to extra expenditure and which will affect competitiveness.

4.58 In case, allowing foreign EPABXs is considered, primacy of Indian Telegraph Act over foreign numbers / extensions working in such OSP centres and adequate safeguards w.r.t CDR required to be ensured.

Q27. Whether use of EPABX at foreign location in case of International OSPs may be allowed? If yes, please suggest suitable terms and conditions to ensure that the scope of authorized TSP is not infringed and security requirements are met.

(18) Security Conditions:

4.59 The Chapter V of OSP registration provides the Security conditions applicable to the OSPs. In order to ensure their compliance, the

Licensor reserves the right to inspect as detailed in clause 1 of the Security conditions. The Security condition also provides prohibition of certain activities by the OSP under Clause 2. The Clause 3 of Chapter V provides security conditions regarding access to equipments, compliance to safety and other statute/ rule/ regulation including provision of CDR to security agencies.

Q28. Do you agree with the Security Conditions mentioned in the Chapter V of the OSP guidelines? If not, please suggest suitable changes with justification.

(19) Quantum and extent of penalties

4.60 The provision for penalty in case of violation of terms and conditions has been given in different chapters of the guidelines for OSP registration. These are as below:

Sub clause 4 of Clause (3) of Terms & Conditions specific to the Domestic OSP (Chapter III of OSP guidelines)

The Authority reserves the right to carry out the audit periodically. If the Authority is satisfied that there has been a violation of any of the conditions, it reserves the right to take punitive action including forfeiture of the security deposit and / or the cancellation of the registration.

Sharing of infrastructure between international OSP and domestic OSP (Chapter IV, Clause 1(e))

If the Authority is satisfied that there has been a violation of the conditions, it reserves the right to take punitive action including forfeiture of the security deposit and / or the cancellation of the registration held by OSP and the company shall be debarred from taking OSP registration for 3 years from the date of cancellation of such registration.

Chapter IV, Clause 2

(c) Any failure to abide by the terms & conditions of Registration shall entitle the Authority to encash the Bank Guarantees and to convert into a cash security without any reference to the OSP at his risk and cost. No interest or compensation whatsoever shall be payable by the Authority on such encashment.

(d) Without prejudice to its rights of any other remedy, the Authority may encash Bank Guarantee and forfeit the security deposit in case of any breach in terms & conditions of the Registration by the OSP.

Penalty in case of violations for conditions related to Work from Home:

The Authority shall have the right to forfeit the security deposit, in case of violation of any of the terms & conditions for OSP category in the schedule appended hereto, identified to its satisfaction. The OSP shall be liable for any violation of the said terms and conditions by anyone including but not limited to its employees/ home agents. The Authority reserves the right to take appropriate action including cancellation of the registrations held by OSP and the company shall be debarred from taking OSP registration for three years from the date of cancellation of such registration.

Penalty for violation of terms and conditions of Sharing of EPABX of ICC, DCC OSPs and / or PSTN lines with logical partitioning, Use of Centralized EPABX architecture, Deploying the CUG for internal communication of the OSP company with sharing of EPABX

The Authority shall have right to forfeit the security deposit, in case of violation of any of the terms & conditions for OSP category in the schedule appended hereto, identified to its satisfaction. The OSP shall be liable for any violation of the said terms and conditions by anyone including but not limited to its employees. The Authority reserves the right to take appropriate action including cancellation of the registrations held by OSP and the company shall be debarred from

taking OSP registration for three years from the date of cancellation of such registration.

Q29. Do you agree with the provisions of penalty mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

(20) OSP to OSP interconnectivity providing similar services i.e. third party outsourcing and the safeguards

4.61 Interconnectivity of two or more Domestic OSP Centres of the same Company / LLP / or group of companies is permitted. Interconnection of two or more International OSP of the same Company / LLP or the group companies is permitted, with intimation to the registering authority within 15 days of such interconnection.

4.62 Any interconnection between Domestic or International OSPs not belonging to same company or group of companies is not permitted. Therefore, any domestic OSP cannot have any type of interconnection (voice/data) with either a domestic or international OSP belonging to a different Company.

4.63 As such, any OSP cannot outsource part of any activity to any third party OSP.

Q30. Whether OSP to OSP interconnectivity (not belonging to same company/ LLP/ group of companies) providing similar services should be allowed? If yes, should it be allowed between domestic OSPs only or between international and domestic OSPs also.

Q31. In case OSP interconnectivity is allowed, what safeguards should be provisioned to prevent infringement upon the scope of licensed TSPs.

4.64 The Chapter VI of the annexed OSP guidelines provides miscellaneous conditions to be complied by OSP. In addition, it provides conditions for arbitration.

Q32. Do you agree with the miscellaneous provisions mentioned in the Chapter VI of the OSP guidelines? If not, please suggest suitable changes with justification.

ISSUES RELATED TO UNSOLICITED COMMERCIAL COMMUNICATIONS

4.65 Unsolicited Commercial Communications (UCC) are communications, made via voice calls or SMS, to subscribers without their consent or willingness. Recently, new regulations on UCC, “The Telecom Commercial Communications Customer Preference Regulations, 2018” (TCCCPR, 2018), were issued by TRAI on 19 07.2018.

4.66 The OSPs having out bound voice call facility may be making calls for transactional, promotional and service purposes. They may be making calls as a sender or on behalf of some other entity. Such calls are required to be complying with the provisions of TRAI’s TCCCPR, 2018. Provisions in OSP registrations may be needed to tackle this issue.

Q33. What provisions in the terms and conditions of OSP registration may be made to ensure OSPs to adhere to the provisions of the TCCCPR, 2018.

Q34. Stakeholders may also provide their comments on any other issue relevant to the present consultation.

Chapter-V

Summary of Issues for Consultation

5.1 The view of stakeholders are sought on following issues:

Q1. Please provide your views on the definition of the Application Service in context of OSP. Whether, the Application Services which are purely based on data/ internet should be covered under Application Service for the purpose of defining OSP.

Q2. Whether registration of OSP should be continued or any other regulatory framework should be adopted for OSPs so that the purpose of registration specified by government is met. Please furnish your views with justification.

Q3. What should be the period of validity of OSP registration? Further, what should be validity period for the renewal of OSP registration?

Q4. Do you agree that the documents listed above are adequate to meet the information requirements for OSP registration? If not, please state the documents which should be added or removed along with justification for the same.

Q5: Do you agree with the fee of Rs. 1000/- for registration of each OSP center. If not, please suggest suitable fee with justification.

Q6: Do you agree with the existing procedure of OSP registration for single/ multiple OSP centres? If not, please suggest suitable changes with justification.

Q7: Do you agree with the existing provisions of determination of dormant OSPs and cancellation of their registration? If not, please suggest suitable changes with justification.

Q8. Do you agree with the terms and conditions related to network diagram and network resources in the OSP guidelines? If not, please suggest suitable changes with justification.

Q9. Do you agree with the provisions of internet connectivity to OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

Q10. Do you agree with the provisions related to Hot Sites for disaster management mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

Q11. Do you agree with the provisions of logical separation of PSTN and PLMN network resources with that of leased line/ VPN resources for domestic OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

Q12. Do you agree with the provisions of PSTN connectivity/ interconnection of International OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

Q13. Please provide your views as to how the compliance of terms and conditions may be ensured including security compliance in case the OSP centre and other resources (data centre, PABX, telecom resources) of OSP are at different locations.

Q14. Please provide your views whether extended OSP of existing registered OSP may be allowed without any additional telecom resource. If yes, then what should be the geographical limitation for the extended OSP centre; same building/ same campus/ same city?

Q15. Please provide your views as to how the compliance of terms and conditions may be ensured including security compliance in case of the extended OSP centre.

Q16. Do you agree with the provisions of general conditions for sharing of infrastructure between International OSP and Domestic OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

Q17. Do you agree with the provisions of Technical Conditions under option -1 & 2 for sharing of infrastructure between International OSP and Domestic OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

Q18. In case of distributed network of OSP, please comment about the geographical limit i.e. city, LSA, country, if any, should be imposed. In case, no geographical limit is imposed, the provisions required to be ensure compliance of security conditions and avoid infringement to scope of authorized TSPs.

Q19. Do you agree with the provisions including of logical partitioning mentioned in the OSP guidelines for distributed architecture of EPABX? If not, please suggest suitable changes with justification.

Q20. Do you agree with the monitoring provisions of mentioned in the OSP guidelines for distributed architecture of EPABX? If not, please suggest suitable changes with justification.

Q21. Please comment on the scope of services under CCSP/HCCSP, checks required / conditions imposed on the CCSP/ HCCSP including regulating under any license/ registration so that the full potential of the technology available could be exploited for both domestic and international OSP, and there is no infringement of the scope of services of authorized TSPs.

Q22. Please provide your comments on monitoring of compliance in case interconnection of data and voice path is allowed for domestic operations.

Q23. Do you agree with the provisions for use of CUG for internal communications of OSP as mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

Q24. Do you agree with the monitoring provisions for use of CUG for internal communications of OSP mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

Q25. Do you agree with the provisions of 'Work from Home' mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

Q26. Whether domestic operations by International OSPs for serving their customers in India may be allowed? If yes, please suggest suitable terms and conditions to ensure that the scope of authorized TSP is not infringed and security requirements are met.

Q27. Whether use of EPABX at foreign location in case of International OSPs may be allowed? If yes, please suggest suitable terms and conditions to ensure that the scope of authorized TSP is not infringed and security requirements are met.

Q28. Do you agree with the Security Conditions mentioned in the Chapter V of the OSP guidelines? If not, please suggest suitable changes with justification.

Q29. Do you agree with the provisions of penalty mentioned in the OSP guidelines? If not, please suggest suitable changes with justification.

Q30. Whether OSP to OSP interconnectivity (not belonging to same company/ LLP/ group of companies) providing similar services should be allowed? If yes, should it be allowed between domestic OSPs only or between international and domestic OSPs also.

Q31. In case OSP interconnectivity is allowed, what safeguards should be provisioned to prevent infringement upon the scope of licensed TSPs.

Q32. Do you agree with the miscellaneous provisions mentioned in the Chapter VI of the OSP guidelines? If not, please suggest suitable changes with justification.

Q33. What provisions in the terms and conditions of OSP registration may be made to ensure OSPs to adhere to the provisions of the TCCCPR, 2018.

Q34. Stakeholders may also provide their comments on any other issue relevant to the present consultation.

**Government of India
Ministry of Communications
Department of Telecommunications
Sanchar Bhawan, 20, Ashoka Road, New Delhi-110001
(CS-I Cell)**

No. 18-08/2015-CS-I

Dated: 10th Sept., 2018

To

The Secretary
Telecom Regulatory Authority of India (TRAI),
MTNL Building,
Jawahar Lal Nehru Marg,
New Delhi-110002

Subject: Recommendations of TRAI in regard to review of terms and conditions for registration of Other Service Providers (OSPs).

Dear Sir,

The terms and conditions for Other Service Provider (OSP) were issued vide No. 18-2/2008-CS-I on 05.08.2008 (enclosed as Annexure-I). The registration of OSPs was decentralized to all the Vigilance Telecom Monitoring (VTM) Cells (presently LSA field units) w.e.f. 01.06.2008. Amendments to these terms and conditions have been issued from time to time as per the details given below:

- (i) No. 18-2/2009-CS-I dated 22.05.2009 (enclosed as Annexure-II)
- (ii) No. 18-5/2009-CS-I dated 07.10.2011 (enclosed as Annexure-III)
- (iii) No. 18-5/2012-CS-I dated 21.11.2012 (enclosed as Annexure-IV)
- (iv) No. 18-05/2009-CS-I dated 12.01.2016 (enclosed as Annexure-V)
- (v) No. 18-05/2009-CS-I dated 13.01.2017 (enclosed as Annexure-VI)

Limited Liability Partnership (LLP) Firms registered under LLP Act, 2008 have also been allowed to be registered under OSP category vide No. 18-05/2009-CS-I dated 12.01.2016 (Annexure-V, as above).

2. Keeping in view the vast changes in technology and evolution of different network architectures and solutions for setting up the OSP network and the resultant new user applications and service delivery scenarios, there is a need to review the technical, financial and regulatory requirements, scope of operations and the terms and conditions of registration of OSPs in a comprehensive and holistic manner. A technology neutral framework is required to be devised so as to promote innovations for setting up the OSP service delivery platforms in the most cost efficient manner for faster promotion of OSPs in the country. However, it is essential to ensure that the security aspects are guarded in national interest and there is no infringement of the scope of licensees of the Telecom Service Providers (TSP). Such futuristic and

technology neutral policy can be framed only in consultation with all the stakeholders of the OSP environment such as the Contact Centre Service Providers (CCSPs)/ entities offering similar services to the registered OSPs using the distributed architecture, OSPs, TSPs, customers of OSPs and other interested parties. A list of the major issues for consultation is placed as Annexure-A.

3. The Recommendations of the TRAI are accordingly solicited on the terms and conditions of registration of OSPs under 11 (1) (a) of TRAI Act, 1997 on the issues highlighted in Annexure-A. TRAI may also give its view on any other issues considered relevant.

4. It would be appreciated, if TRAI can indicate the time by which it would be possible for TRAI to make available the requisite recommendations.

Encl: As above



(Dr. R.M. Chaturvedi)
DDG (CS)

**Important Issues for deliberation in respect of terms and conditions
for registration of Other Service Providers (OSPs)**

1. Definition of OSP and appropriate regulatory framework.
2. Validity period of OSP registration.
3. Necessary documents required for registration and the process of registration including the connectivity of OSP with TSPs, network diagram etc.
4. Applicable registration fee and other charges for different OSPs.
5. Necessary provisions for monitoring and security mechanism so that the OSPs, both International Call Centres (ICC) and Domestic Call Centres (DCC), could be monitored and regulated for compliance of the terms and conditions of the registration.
6. Quantum and extent of penalties for violation of the terms and conditions of the registration.
7. OSP to OSP interconnectivity providing similar services i.e. third party outsourcing and the safeguards to be provisioned in this regard, if any.
8. Provisions to be made in respect of the 'Open source EPABX' or distributed architecture of EPABXs, media gateways and other network elements for International Call Centres (ICC) and Domestic Call Centres (DCC), keeping in view the offerings of Hosted Contact Centre Service Provider/ Contact Centre Service Providers (CCSPs)/ other entities offering similar services.
9. The requirement to ensure that there is a clear responsibility matrix for different agencies such as CCSPs/ other similar entities operating in OSP ecosystem and the security compliances are met by the OSPs ensuring that there is no infringement of the scope of the telecom license service provider and the necessary provisions in this regard.
10. Geographical spread of distributed network architecture for different OSPs i.e. city area, national, international spread of networks and the necessary provisions required to be made where EPABX or other network elements are planned to be located outside Indian geography.
11. Provisions required to be made regarding Internet connectivity to OSPs so that there is no infringement of the telecom license service providers (ISPs) and the restrictions thereupon, if any.
12. Provisions required to be made to enable 'Work from Home' to OSPs and the restrictions thereupon, if any.
13. Provisions required to be made in respect of MPLS connectivity to OSPs and use of different applications and services and the necessary safeguard in this regard, if any.
14. Guidelines for provisioning of the infrastructure/ resources outside the location of the OSPs.
15. Safeguards to be prescribed so that the data and voice connectivity obtained by OSPs are not misused, if any.
16. Issues related to granting permission to International OSP Centres for domestic operation using foreign DID numbers or EPABXs installed outside Indian geography and the related provisions in this regard.
17. Monitoring mechanism for International OSP centres having connectivity of ILL/IPLC/MPLS and using VoIP Minutes from foreign end or unauthorised VOIP providers in India.
18. Provisions to access to client's domestic or international network to reach client's global locations to optimize costs.
19. Any other provisions that may be made to provide for a congenial and business friendly environment by reducing compliance burden and to accelerate the growth of the OSP industry.
20. Any other issue related to OSPs.

1. Annexure – I to DoT letter No. 18-08/2015-CS-I

http://dot.gov.in/sites/default/files/2016_11_03%20OSP-CS.pdf?download=1

2. Annexure – II to DoT letter No. 18-08/2015-CS-I

<http://dot.gov.in/sites/default/files/5-Amendment.doc?download=1>

3. Annexure – III to DoT letter No. 18-08/2015-CS-I

<http://dot.gov.in/sites/default/files/DOC111011-001.pdf%20dated11-10-2011.pdf?download=1>

4. Annexure – IV to DoT letter No. 18-08/2015-CS-I

<http://dot.gov.in/sites/default/files/21.11.12.pdf?download=1>

5. Annexure – V to DoT letter No. 18-08/2015-CS-I

http://dot.gov.in/sites/default/files/2016_01_13%20OSP-CS.pdf?download=1

6. Annexure – VI to DoT letter No. 18-08/2015-CS-I

http://dot.gov.in/sites/default/files/2017_01_13%20OSP%20CSI_0.pdf?download=1

List of Acronyms

Sl. No.	Abbreviation	Full Form
1	BG	Bank Guarantee
2	BPO	Business Process Outsourcing
3	BTRC	Bangladesh Telecom Regulatory Commission
4	CAGR	Compound annual growth rate
5	CCSP	Contact Centre Service Providers
6	CDR	Call Detail Records
7	CLI	Calling Line Identity or Calling Line Identification
8	CUG	Closed User Group
9	DoT	Department of Telecommunications
10	EPABX	Electronic Private Automatic Branch Exchange
11	GMPCS	Global Mobile Personal Communications by Satellite
12	HCCSP	Hosted Contact Centre Service Providers
13	ICC	International Call Centre
14	ILD	International Long Distance
15	ILL	Internet Leased Line
16	IP PABX	Internet Protocol Private Automatic Branch Exchange
17	IPLC	International Private Leased Circuit
18	ISDN	Integrated Services Digital Network
19	IT-BPM	Information Technology and Business Process Management
20	ITES / ITeS	Information Technology Enabled Service
21	IVR	Interactive Voice Response
22	LAN	Local Area Network
23	LLP	Limited Liability Partnership
24	LSA	Licensed Service Area
25	MPLS	Multiprotocol Label Switching
26	NASSCOM	The National Association of Software and Services Companies
27	NEFT	National Electronic Funds Transfer
28	NLD	National Long Distance
29	NLDO	National Long Distance Operator
30	NTP99	New Telecom Policy, 1999
31	NTRP	Non-Tax Receipt Portal
32	OSP	Other Service Provider
33	PABX	Private Automatic Branch Exchange
34	PLMN	Public Land Mobile Network
35	PoP	Point-of-Presence
36	PSTN	Public Switched Telephone Network
37	RTGS	Real Time Gross Settlement
38	SDH	Synchronous Digital Hierarchy
39	SSA	Secondary Switching Area
40	TERM	Telecom Enforcement Resource and Monitoring

41	TRAI	Telecom Regulatory Authority of India
42	TSP	Telecom Service Provider
43	UAS	Unified Access Service
44	UDR	User Data Records
45	VPN	Virtual Private Network
46	VSAT	Very Small Aperture Terminal
47	VTM	Vigilance Telecom Monitoring