

Reliance Communications Limited Response to TRAI Consultation Paper on 'Delinking of License for Networks from Delivery of Services by Way of Virtual Network Operators'.

Executive Summary

1. **MVNO(s) should be introduced in the Indian market for providing differentiated, value added and customized services for which the competition is practically non-existent as per TRAI's existing recommendations.**
2. **MVNOs cannot and will not pose a competitive threat to NSOs as MVNOs sell the services of the NSO(s) itself thereby complementing their operations and help in improving the existing TSP(s) (a) network utilization efficiency, (b) sprucing up the top line of the NSOs as well as (c) improve the bottom line further.**
3. **Improve effective utilization of the existing telecom infrastructure by facilitating optimal loading of the NSO network by permitting reselling of its services.**
4. **To start with VNOs should be introduced for provisioning Mobile telecom services of all kinds, viz. voice, data and video. Authorization to provide other UL services may be reviewed after maturity of MVNO concept in Indian telecom market.**
5. **The apprehension regarding lack of sufficiency of telecom infrastructure resources, including spectrum, is unfounded.**
6. **Introduction of MVNOs shall,**
 - a. **Prove to be an effective solution for achieving the rural tele-density targets defined in NTP-2012 due to its ability to sell the services of an existing TSP(s) beyond the marketing reach of the existing TSP(s).**
 - b. **Enable optimal exploitation and monetisation of TSPs spare capacities thereby resulting in a win-win situation for all the stake holders vis, the TSPs, consumers and the government.**
7. **The terms and conditions for sharing the infrastructure between TSP and MVNO should be left to mutual commercial agreement between the NSO and the MVNO.**
8. **MVNOs can be permitted to create their own limited infrastructure in respect of Customer Service, Billing and VAS, to reach out to niche markets.**
9. **Since, we are recommending introduction of only MVNO service to start with the concept of VNO, therefore services through LCO or MSO does not arise.**
10. **The existing UL,**
 - a. **Is comprehensive enough to cater for all types of service providers, i.e. NSO and MVNO, and MVNO / NSO only. However, appending a new chapter / guidelines to**

the existing UL is felt necessary to meet the regulatory requirements, like (a) AGR, (b) Parenting of MVNO, (c) Cross holding restrictions between MVNOs and MVNO and NSO, (d) Allotment of numbering resources, (e) LIM responsibilities, (f) QoS, (g) MNP, (h) M & A.

- b. Has the advantage of accommodating future requirements of technological development and innovation through appending of authorization chapters as per requirements.
11. The MVNO licensing should either be National or LSA based and once an MVNO takes the permission from DoT to operate in the specific LSA/ Pan Indian region, then it should follow the geographic regime of the parent NSO authorization as per UL.
12. The MVNO license should be 10 years and should be renewed on a request from the MVNO.
13. Migration of subscribers to the parent NSO should be mandated if the MVNOs' license is not renewed at the end of its validity period.
14. As long as an underlying NSO is able to support the requisite QoS for the combined subscriber base of its own and the MVNO(s) it is parenting, there should be no stipulated restriction on (a) the number of MVNOs parented to a NSO, (b) the number of MVNOs in a service area for a particular service.
15. A MVNO should be permitted to be parented by only one NSO per LSA. This is in line with the practices followed across the world.
16. The eligibility conditions for becoming a MVNO should be (a) Entry Fee, (b) Net Worth restrictions and (c) FBG to be equivalent to 25% of the UL authorization for access service.
17. PBG should not be applicable since there would be no rollout obligations associated with the MVNO.
18. An existing Unified Licensee with authorisation to provide all services should not be eligible to become a MVNO of another Licensee in the same or other LSA.
19. Cross-holding between a NSO and MVNO should not be permitted in same LSA.
20. MVNO should utilise the numbering resources, Network Codes and Locational Routing Number (LRN) of the underlying NSO only for simplifying the management of telecom operations, including MNP.
21. LF should be applicable and levied, similar to or higher than the NSO, on the revenue earned by the MVNO but after getting pass through on the payments made to the NSO.

22. No SUC should be applicable to the MVNO since it does not hold any spectrum.
23. Access to NSOs network to a MVNO should be left to the mutual commercial agreement between the NSO and MVNO as it is a purely commercial agreement between the two parties.
24. The MVNO shall be responsible for (a) CAF verification, (b) number activation of the customers that he acquires, (c) maintaining QoS standards, as per TRAI's regulations, while provisioning services to its customers.
25. The recently announced M&A guidelines issued by the Government for existing players should be applicable for M&A of NSOs.
26. For the M&A of (a) NSO and MVNO and (b) MVNO to MVNO, Companies act & competition law should be applicable. DoT to be only intimated and same should be taken on record by DoT.
27. The MVNO should be treated equivalent to the NSO / existing TSPs meeting obligations arising from Tariff orders / regulations /directions etc. issued by TRAI from time to time.
28. LIM requirement of any MVNO subscribers shall be handed over to the respective NSO under intimation to the requisite governmental agency.

DETAILED RESPONSE

Q1. (a) Is there any need to introduce more competition in service delivery by the way of introduction of VNOs in the sector? If not, why not?

(b) If yes, is it the right time to introduce VNOs?

Q2. Will VNOs pose a threat to NSOs or will they complement their operations? Justify your answer.

Our Response.

Yes, the mature Indian telecom market is ripe for introduction of MVNOs, as per TRAI's existing recommendations, as their introduction shall galvanize the telecom market by providing differentiated, value added and customized services for which competition is practically non-existent.

No, MVNOs cannot and will not pose a competitive threat to NSOs as MVNOs sell the services of the NSO(s) itself thereby complementing their operations and help in improving the existing NSO(s) (a) network utilization efficiency, (b) sprucing up the top line of the NSOs as well as (c) improve the bottom line further.

1. A TSP launches its services with the aim of earning revenue from its services. The sale of TSP services requires a chain of distributors and retailers and a MVNO is akin to a retailer of the services of the underlying TSP. With availability of multiple TSPs in the market, the competition already exists; a MVNO is only contributing to the revenues of the TSPs by

selling the services of the TSP(s), albeit by leveraging his own brand value, market clout, retail stores / chain and sales acumen. **By entering into a contract with a MVNO, the TSP is exercising its right to sell its licensed services through a third party that specializes in selling services / goods or anything; therefore, considering MVNO as a competitor to an existing TSP (NSO + SDO / MVNO) would be inappropriate. A MVNO in fact can be considered as a catalyst that helps in improving the existing TSP(s) (a) network utilization efficiency and (b) the top line itself instead of competing with them.**

2. As per the GSMA Intelligence analysis titled 'The global MVNO landscape, 2012 – 2014' dated Jun 2014, MVNOs are an attractive proposition for the operators as well as the regulators. While they aid in increasing the operators revenues through innovative, high value added services, from the regulators perspective they contribute towards their aim of inducing greater efficiency and proliferation of services into the market.
3. Given the current maturity levels and dynamics of Indian market, its revenue share distribution, spectrum utilization efficiencies and the general financial health of the telecom sector, introduction of MVNO, with a strong retail chain, shall firstly, herald the era of specialised services in India and secondly, contribute towards improvement of overall QoS of the telecom services by ensuring the efficient use of existing telecommunication infrastructure. Therefore, it is felt that **the mature Indian telecom market is ripe for entry of MVNOs for providing differentiated, value added and customized services for which competition is practically non-existent.**
4. The sustenance of the growth momentum for the TSPs requires that the cusp of a mature and consolidating market on one hand and the need to ensure optimal exploitation of the existing TSPs network resources, results in better and differentiated services for the consumers. The incentives for introduction of MVNOs critically depend on two issues: Firstly, the mode of competition and, secondly, the degree of product differentiation. Generally, NSO(s) will be amenable to provide network access to MVNO(s) if the services offered by the candidate MVNO(s) are sufficiently differentiated, as with a high degree of product differentiation the revenue effects outweigh the competition (or cannibalization) effects. NSOs will always invite MVNOs onto their network if the market is sufficiently large (under Cournot competition), even if the MVNOs offer homogeneous products. Envisaging this, one of the **objectives of NTP 2012** (Para 3.8 under section on Licensing, Convergence and VAS), has been facilitation of resale of telecom services, both wholesale and retail, through introduction of virtual operators.
5. As per the GSMA Intelligence analysis titled 'The global MVNO landscape, 2012 – 2014' dated Jun 2014, shows that MVNOs remain most prevalent in mature markets where penetration (based on connections) has surpassed 100%. Europe is home to more than two thirds of global MVNOs (579), followed by the Americas (128) and Asia (79). This report has identified eight separate categories of MVNOs, namely discount, telecom, media / entertainment, migrant, retail, business, roaming and M2M.

Our Recommendations

6. In view of the foregoing and the fact that the Indian telecom services consumers needs to graduate from the existing vanilla services being offered by the TSPs, it is recommended that,
 - 6.1. **MVNO(s) should be introduced in the Indian market, as per TRAI's existing recommendations, for providing differentiated, value added and customized services for which the competition is practically non-existent.**
 - 6.2. **MVNOs cannot and will not pose a competitive threat to NSOs as MVNOs sell the services of the NSO(s) itself thereby complementing their operations and help in improving the existing TSP(s) (a) network utilization efficiency, (b) sprucing up the top line of the NSOs as well as (c) improve the bottom line further.**

Q3. How can effective utilization of existing infrastructure be improved? Can MVNOs be a solution to achieve targets defined in NTP-2012 for rural density?

Our Response.

Effective utilization of the existing telecom infrastructure can be improved by facilitating optimal loading of the NSO network by permitting reselling of its services.

A MVNO can prove to be an effective solution for achieving the rural tele-density targets defined in NTP-2012 due to its ability to sell the services of an existing TSP(s) beyond the marketing reach of the existing TSP(s).

1. While launching services, all TSPs aspire to be able to utilize their network resources to their maximum capabilities and capacities. With all other factors, viz, technology, coverage, spectrum bandwidth, QoS, etc being almost equated, it's the marketing capabilities of the respective operators which end up creating the market share differential amongst them. The market share differential in turn results in creation of spare capacities with some operators while others can be in a position where they experience constraint of resources.
2. Though solutions like spectrum sharing, sharing of passive and active infrastructure, even spectrum trading and M & A to some extent can contribute towards improving the effective utilisation of the existing TSP(s) network resources, but these measures firstly, are capital intensive and secondly, can still lead to creation of spare capacities with some operators and constraint of resources with others. Introduction of MVNO on the other hand endeavours to balance out the spare capacities and resources constraints by virtual transfer of spare capacities of one operator to the other selling agency i.e. MVNO, thereby improving the effective utilization of the existing telecom infrastructure.
3. The technological solution for avoiding situations of idle capacities and capabilities has been found in creation of 'Virtual common pool of computing resources' wherein optimal utilization of computing resources is achieved while provisioning services. **MVNO conceptually, is quite similar to 'sourcing of services from a virtual pool of telecom resources' wherein the network resources of a TSP forms the 'common pool' which can be leveraged by the MVNO for provisioning services under his brand name, thereby**

ensuring improvement of effective utilization of the existing infrastructure of the TSP(s).

4. As per TRAI's own recommendations on "Mobile Virtual Network Operator (MVNO)" dated 6 Aug 08, "The introduction of Mobile Virtual Network Operator (MVNO) is seen as a natural progression towards enhancing free market principles and contributing to the efficient use of existing telecommunication infrastructure."
5. For a mature telecom market, a new entrant would prefer to climb slowly up a ladder of investment (As per the theory of 'Ladder of Investment') if they can enter the market without burdensome investment requirements, i.e. by leveraging the resources of existing TSPs, offering only services. Availability of a partner who can enable enhancement of revenues of the existing TSPs by selling their services, even if under a different brand name, or who is willing to invest to increase the coverage footprint of their network and sell the network services would be a welcome step and contribute in maintaining the momentum of proliferation of telecom services thereby enabling achievement of the tele-density targets of NTP-2012. A 'ladder of investment' based business model therefore shall be more appealing for a business entity wanting to enter a mature market like India and tapping the hitherto untapped market. **A MVNO matches the model perfectly for the same and can prove to be an effective solution for achieving the rural tele-density targets defined in NTP-2012 by selling the services of an existing TSP(s) beyond the marketing reach of the existing TSP(s).**

Our Recommendations

6. In view of the foregoing introduction of MVNOs is recommended as it shall,
 - 6.1. **Improve effective utilization of the existing telecom infrastructure by facilitating optimal loading of the NSO network by permitting reselling of its services.**
 - 6.2. **Prove to be an effective solution for achieving the rural tele-density targets defined in NTP-2012 due to its ability to sell the services of an existing TSP(s) beyond the marketing reach of the existing TSP(s).**

Q4. Does there exist a business case for introduction of VNOs in all segments of Voice, Data and Videos?

Q5. Whether VNOs be introduced in all or some of the services notified in the UL? Please name the services and the justification.

Yes, there exists a business case for introduction of VNOs in all segments of Voice, Data and Videos of Mobile telecom services. We therefore recommend that initially VNOs should be introduced for provisioning Mobile telecom services of all kinds.

Authorization to provide other UL services may be reviewed after maturity of MVNO concept in Indian telecom market.

Our Response.

1. As brought out in our response to earlier questions, the Indian telecom market has matured to a level where the services of the existing TSPs are considered as a basic necessity by

the consumers. Since almost the entire telecom industry is passing through a consolidation phase, the market can be rejuvenated only by making available certain niche, highly customized and differentiated telecom services. From the TSPs point of view, they need to optimally exploit their sunken investments and monetize their services provisioning resources. And finally from the governments' perspective, the aim is to provide better, innovative yet affordable telecom services with the possibility of enhancing its own revenue / without affecting any loss of revenue. Introduction of MVNOs shall prove to be a win-win situation for all the stakeholders as elucidated in the succeeding paragraphs.

2. **Benefits to the Consumer.** Some of the benefits that the consumers shall accrue from the services of MVNOs are as given below,

2.1. **Customised Services.** MVNOs are characterized by their ability to provide customized services. Their introduction shall provide an option of catering to the specific requirements of the customers and offer novel and made to order content and services. GSMA Intelligence analysis quoted above has identified eight separate categories of MVNOs, namely discount, telecom, media / entertainment, migrant, retail, business, roaming and M2M.

2.2. **Brand Consciousness.** Given the growing brand consciousness among India consumers, an established brand / a markedly visible and strongly branded MVNO is bound to appeal of the Indian Consumer.

2.3. **Availability of niche services.** Due to their parent brand appeal, MVNOs are better placed to provide certain limited but niche services at higher prices, which a MNO would be hesitant to provision due to lack of economies of scale.

2.4. As per the GSMA Intelligence analysis quoted above, in 2012, 'discount' and 'telecom' VNOs are the most prominent types of operation, accounting for 46% of the global VNO market, while 19% are owned by companies that come from adjacent industries (e.g. retailers, banks, TV or media organisations), leaving 34% of the market to specialised providers focused on segments such as business, migrant, M2M and roamers.

2.5. The aspirations of the net savvy, brand conscious generation of today are for better and specialized services. Since, MVNOs would be free from the vagaries of network operations; they can focus on providing niche, highly customized and differentiated telecom services to the consumers. **Given the fact that the Indian population is amongst the youngest in the world and that they shall be able to avail the above mentioned benefits, there exists a ready market and hence a viable business case for the MVNOs to start operations.**

3. **Benefits to the TSP's.** Some of the benefits that the TSPs shall accrue from the introduction of MVNOs are as given below,

3.1. **Enhancement of revenues.** TSPs aim to achieve most gainful monetization of their sunken costs through the optimal utilization of its network resources. Selling minutes / megabytes directly to the consumer or in bulk to a MVNO shall contribute towards

optimal utilization of the TSP's network resources and consequently enhancement of the TSP's revenues only.

- 3.2. **Realization of economies of scale.** Enlarged subscriber base, through direct retailing of telecom services / through whole sale of minutes and megabytes, shall enable exploitation of economies of scales for the underlying TSP(s) while provision services or making available mobile handsets and accessories, resulting in better affordability of telecom services.
 - 3.3. **Optimization of OPEX through outsourcing model.** The TSPs are already optimizing their OPEX through adoption of models for outsourcing of services, viz, network operations, customer services, SACFA clearances, etc. Sharing of sales OPEX between the TSP and the MVNO shall be an extension of this familiar outsourcing model, thereby enabling further optimization of the TSPs OPEX which shall ultimately have an impact on better affordability of the telecom services.
 - 3.4. The existing financial health of the TSPs in India, mandates evolution of innovative strategies. With bulk sourcing of minutes and megabytes from the TSPs, MVNOs shall directly contribute towards enhancement of the TSPs network resources utilization. **Hence, there exists a viable and potent business case for the TSPs in introduction of MVNOs in the Indian telecom market for access services.**
4. **Benefits to the Government.** Some of the benefits that the government shall accrue from the introduction of MVNOs are as given below,
 - 4.1. **Enhanced revenues for the govt.**
 - 4.1.1. MVNOs subscriber base shall add onto the existing loading of spectrum of the TSP resulting in increased revenue inflow for the government.
 - 4.1.2. With an MVNO riding over a TSP's network, the TSP shall have no option but to ensure spectrum sufficiency else the services of both the operators shall be below par. This shall force the TSP to participate actively in spectrum auction activities resulting in enhanced collections.
 - 4.2. **Better penetration of Mobile services.** Despite adequate coverage in a LSA, a TSP at times is unable to penetrate the entire market on its own resulting in availability of spare capacities over its network. A MVNO on the other hand shall be able to make inroads in this hitherto untouched population and increase the mobile services reach and utilization. As per a GSMA Intelligence analysis titled 'The global MVNO landscape, 2012 – 2014'. "in Belgium, though MVNO connections made up just 0.1% of Proximus' total connections at the end of 2013, but they were almost a quarter (23.8%) of rival Mobistar's. In some cases, MVNO activity has offset declines or flat growth in organic connections (e.g. Optus in Australia)".
 - 4.3. With the ambitious vision of digitization of governmental services, it is imperative that firstly, telecom services should proliferate to the remotest nook and corner of the country and secondly, the telecom services should be affordable for the population at large. Introduction of MVNOs shall not only contribute towards achievement of the

government's above mentioned goals, but it can also explore the options of subsidized services, in certain selected areas of the country, on account of increased revenues. **Thus, even from the government's stand point, there exists a viable business case for introduction of MVNOs for access services.**

Our Recommendation

5. **To start with VNOs should be introduced for provisioning Mobile telecom services of all kinds, viz. voice, data and video. Authorization to provide other UL services may be reviewed after maturity of MVNO concept in Indian telecom market.**

Q6. Is there sufficient infrastructure (active and passive including access spectrum) available with a TSP to meet its own requirements? Can TSPs spare available infrastructure for VNOs?

Our Response.

Yes, there are spare capacities available in the market for the introduction of MVNOs as they will enable optimal exploitation and monetisation of TSPs spare capacities thereby resulting in a win-win situation for all the stake holders vis, the TSPs, consumers and the government.

1. Conceptually, MVNO contributes towards the increase in effective utilization of telecom services by contracting bulk purchase of a TSPs (NSO + SDO / MVNO) access services i.e the TSPs whose networks are not loaded substantially benefit by graduating from retailing their services to selling them in whole sale. Since some of the TSPs are yet to monetize their respective spectrum holdings to their full potential, it is these TSPs that the MVNOs shall bank on to source their capacities from. Therefore, **it is felt that the apprehension that TSPs would really be able to spare their infrastructure for MVNOs is unfounded.** MVNO services are all about branding. Sourcing telecom minutes / megabyte capacities from the less utilized / exploited networks shall not only enhance telecom services utilization of the existing TSPs, but shall also enable better QoS for the subscribers of the NSO itself as the MVNOs would demand and enact stringent SLAs for provisioning higher QoS based services.

Our Recommendations.

2. In view of the foregoing, it is recommended that,
 - 2.1. **The apprehension regarding lack of sufficiency of telecom infrastructure resources, including spectrum, is unfounded. Spare capacities are available in the market for the introduction of MVNOs.**
 - 2.2. **Introduction of MVNO shall enable optimal exploitation and monetisation of TSPs spare capacities thereby resulting in a win-win situation for all the stake holders vis, the TSPs, consumers and the government.**

Q7. If any TSP is able to share its infrastructure with VNOs, what should be the broad terms and conditions for sharing the infrastructure?

Our Response

The terms and conditions for sharing the infrastructure between TSP and MVNO should be left to mutual commercial agreement.

Since, MVNO shall be re-selling the telecom services of the underlying TSP, it should be left to the mutual agreement between the NSO and MVNO for deciding on the terms and conditions of the sharing agreement.

Our Recommendation

The terms and conditions for sharing the infrastructure between TSP and MVNO should be left to mutual commercial agreement.

Q8. Should VNOs be allowed to create their own infrastructure to reach out to niche markets? If yes, to what extent?

Our Response

Yes, MVNOs can be allowed to create their own limited infrastructure in respect of Customer Service, Billing and VAS, to reach out to niche markets.

Conceptually, MVNOs provision differentiated services utilizing the underlying infrastructure of the NSO. However, as described in the CP, in case a MVNO is willing to invest in creating its own infrastructure for provisioning features for creating differentiation of the basic services (i.e. Customer service or billing systems), it is felt that the same should be permitted as the MVNO model warrants such investments.

Our Recommendation

MVNOs can be permitted to create their own limited infrastructure for Customer care, Billing and VAS, to reach out to niche markets.

Q9. Should Local Cable Operators (LCOs) or Multi System Operators (MSOs) with cable networks be permitted to share infrastructure with VNOs to provide last mile connectivity?

Our Response.

We recommend that initially only the concept of MVNO should be introduced in the Indian telecom market and once this concept stabilizes only then a review may be done for allowing VNO for other UL services. **Therefore, allowing LCO or MSO to provide last mile does not arise.**

Q10. Does the adoption of the VNO model requires an entirely new licensing regime or will a chapter or a separate section for VNOs added to the existing UL suffice?

Q11. Comment on what measures are required to ensure that the existing or new licensing regime takes care of future requirements of technological development and innovation and provides a clear roadmap for migration to existing service providers.

Q12. In view of the complexity in the existing licensing regime as explained in Para 3.16 to 3.18, Should India move towards NSO and VNO based licensing?

Q13. If yes, whether existing licensees may be mandated to migrate to NSO & VNO based new licensing regime? What challenges will arise in the migration to the two types of licensing framework?

Our Response.

The existing UL is comprehensive enough to cater for both types of service providers, i.e. NSO and MVNO, and MVNO / NSO only, hence there is no need for migrating to a new, entirely different licensing regime. However, appending a new chapter / guidelines to the existing UL is felt necessary to meet the regulatory requirements, like (a) AGR, (b) Parenting of MVNO, (c) Cross holding restrictions between MVNOs and MVNO and NSO, (d) Allotment of numbering resources, (e) LIM responsibilities, (f) QoS, (g) MNP, (h) M & A.

The existing UL also has the advantage of accommodating future requirements of technological development and innovation through appending of authorization chapters as per requirements.

1. The existing TSPs have been migrated to the 'Unified Licensing (UL)' regime. The basic philosophy for introduction of UL was to recognize the evolution of digital services wherein convergence of voice, video and data were catered for. As per the 'Guidelines for grant of UL' dated 19 Aug 13, UL has been introduced to aid the "move towards convergence between various services, networks, platforms, technologies and overcome the existing segregation of licensing, registration and regulatory mechanisms in these areas to enhance affordability, increase access, delivery of multiple services and reduce cost".
2. Elaborating further, these guidelines have envisaged "providing secure, reliable, affordable and high quality converged telecommunication services anytime, anywhere for an accelerated inclusive socio-economic development. One of the objectives of the National Telecom Policy-2012 is "Strive to create One Nation - One License" across services and service areas".
3. In continuation of the philosophy of introduction of UL, it would be most appropriate to append new authorizations for NSO and MVNO apart from the existing integrated NSO and VNO operators. This shall also be in conformation to the practice that was followed while permitting the resale of IPLC.
4. Introduction of MVNOs shall also lead to de-layering of network from its native services, therefore, it would definitely require realignment of the regulatory guidelines in some of the areas. Since, in Aug 2008 TRAI has already undertaken a consultative exercise and made its recommendations on 'Introduction of VNO', it is envisaged that the issues are well documented and any additional issues can be brought out through a fresh consultative process.
5. Some regulatory aspects that are felt to require realignment / issuance of fresh guidelines are like (a) AGR, (b) Parenting of MVNO, (c) Cross holding restrictions between MVNOs and

MVNO and NSO, (d) Allotment of numbering resources, (e) LIM responsibilities, (f) QoS, (g) MNP, (h) M & A.

6. In view of the foregoing, following are recommended,
 - 6.1. **The existing UL is comprehensive enough to cater for all types of service providers, i.e. NSO and MVNO, and MVNO / NSO only.**
 - 6.2. **There is no need for introduction of a new licensing regime.**
 - 6.3. **There would be a need to formulate regulations and guidelines on certain issues which would be peculiar to introduction of NSOs and MVNOs respectively.**
 - 6.4. **There is also the need to introduce a chapter for regulation of only NSO & VNO operator.**
 - 6.5. **The existing UL also has the advantage of accommodating future requirements of technological development and innovation through appending of authorization chapters as per requirements.**

Q14. Should a VNO be issued a license at the National Level, or for LSAs as in the case of UL or should it be based on the host NSO license areas?

Our Response

The MVNO licensing should either be National or LSA based and once an MVNO takes the permission from DoT to operate in the specific LSA/ Pan Indian region, then it should follow the geographic authorization regime of the parent NSO authorization as per UL.

Q15. What should be the duration of a VNO's license? Should it be linked with the license of the NSO or should it be for 20 years, as in the case of UL?

Our Response

The MVNO license should be 10 years and should be renewed on a request from the MVNO.

1. Holding of a MVNO license shall permit an entity to become a MVNO on a NSO(s) network. Depending on the success of the business case of the MVNO, it should be left to his judgment to continue with his services or not at the end of license expiry period.
2. Migration of subscribers to the parent NSO should be mandated if the MVNOs' license is not renewed at the end of its validity period.

Our Recommendations

3. **The MVNO license should be 10 years and should be renewed on a request from the MVNO.**
4. **Migration of subscribers to the parent NSO should be mandated if the MVNOs' license is not renewed at the end of its validity period.**

Q16. Should there be any cap on the number of VNOs in a service area for a particular service? If yes, what should be the number? Please provide (a) service wise and (b) service area-wise numbers with justification.

Q17. Should there be restriction on number of VNOs parented to a NSO? Justify your answer.

Our Response

No, there should not be any restriction on the number of MVNOs in a service area for a particular service.

No, there should not be any restriction on number of MVNOs parented to a NSO. Adherence to the QoS norms stipulated by TRAI shall automatically dictate the number of MVNOs parented to a NSO.

1. As brought out in our response to earlier questions, MVNOs contribute towards the effective utilization of the existing TSPs network resources, therefore capping the number of MVNOs, being parented by a NSO, would prove to be a dampener in achieving this stated aim of introducing the MVNOs. The only binding condition that can be mandated for any MVNO should be the adherence to TRAI stipulated QoS norms for its services.
2. Additionally, telecom services today are the fuel for innovation. Imposition of any kind of restrictions on the number of MVNOs shall be detrimental to innovation as well as the consumer's interests. **As long as an underlying NSO is able to support the requisite QoS for the combined subscriber base of its own and the MVNO(s) it is parenting, there should be no stipulated restriction on (a) the number of MVNOs parented to a NSO, (b) the number of MVNOs in a service area for a particular service.**

Our Recommendation

3. **As long as an underlying NSO is able to support the requisite QoS for the combined subscriber base of its own and the MVNO(s) it is parenting, there should be no stipulated restriction on (a) the number of MVNOs parented to a NSO, (b) the number of MVNOs in a service area for a particular service.**

Q18. Alternatively, should one VNO be permitted to parent more than one NSO per LSA?

Our Response

No, one MVNO should not be permitted to be parented by more than one NSO per LSA.

Q19. What should be the eligibility conditions for becoming a VNO?

Q22. What should be the financial obligations of VNOs in the form of a) Equity & Networth b) Entry Fee c) PBG and d) FBG etc.? Please quantify the same with justification.

Our Response

The eligibility conditions and financial obligations for becoming a MVNO should be (a) Entry Fee and (b) Equity & Net Worth restrictions and (c) FBG to be equivalent to 25% of the UL authorization for access service.

PBG should not be applicable since there would be no rollout obligations associated with the MVNO.

1. It is important to ensure that the a MVNO entering the market is a serious contender who has a sound business model for ensuring better sales of the telecom services of existing NSOs. Levying of reasonably substantial entry fee and ensuring sound financial health of the parent entity of the MVNO is a must for insulating the consumers from the fly by night operators. Hence, an entry fee and net worth condition, equivalent to 25% of the access authorization of UL, is considered appropriate for the same.
2. Even the other financial obligations like FBG too should be pegged at 25% of the access service authorization defined in UL.
3. Since there would be no rollout obligations, obligatory on part of the MVNO hence, levying of PBG should not be applicable.

Our Recommendations

1. **The eligibility conditions for becoming a MVNO should be (a) Entry Fee and (b) Net Worth restrictions to be equivalent to 25% of the UL authorization for access service.**
2. **The other financial obligations like FBG too should be pegged at 25% of the access service authorization defined in UL.**
3. **PBG should not be applicable since there would be no rollout obligations associated with the MVNO.**

Q20. Whether an existing Unified Licensee with authorisation to provide all services shall be eligible to become a VNO of another Licensee in the same or other LSA? Or, will it need separate / additional authorisation to work as a VNO for delivering services for which it does not have access spectrum?

Q21. Should there be any cross-holding restriction between a NSO and VNOs? If yes, please quantify the same with justification.

Our Response

No, an existing Unified Licensee with authorisation to provide all services should not be eligible to become a MVNO of another Licensee in the same or other LSA.

Yes, cross-holding between a NSO and MVNO should not be permitted in a same LSA.

Q23. Should a VNO utilise numbering resources, Network Codes and Locational Routing Number (LRN) of the NSO? Or, should the Licensor allocate separate numbering resource, Network Codes and Locational Routing Number (LRN) directly to a VNO?

Q24. What operational difficulties could arise in the above arrangements?

Q25. In case your reply is that the Licensor allocates numbering resource to the VNO, then how can it be ensured that the resources allocated to a VNO are efficiently utilised? Should any obligation be placed on VNOs for efficient utilisation of resources?

Q28. How can MNP be facilitated in the VNO/NSO model? Can the VNO be treated separately for MNP purposes? Or, should MNP be facilitated only through the network of the NSO?

Our Response

Yes, a MVNO should utilise numbering resources, Network Codes and Locational Routing Number (LRN) of the NSO only and they should not be allocated separately to the VNO.

Such an arrangement shall facilitate ease of MNP as well.

1. Allocation of numbering resources through the NSO shall offer the flexibility of requisitioning numbers as per demand from the NSO resulting in the optimal utilization of the numbering resources. Since, a MVNO shall be re-selling the services of its underlying NSO, for simplicity, it is suggested that the MVNO should source its numbering resources from the NSO only.
2. In case of any change of parentage / closing of operations by the MVNO, the MVNOs subscribers shall have to follow the MNP procedure for moving to another network, be it the underlying NSO itself.

Our Recommendations

3. **For simplifying the management of telecom operations, including MNP and optimal utilization of numbering resources, it is recommended that a VNO should utilise the numbering resources, Network Codes and Locational Routing Number (LRN) of the underlying NSO only.**
4. **In case of any change of parentage / closing of operations by the MVNO, the MVNOs subscribers shall have to follow the MNP procedure for moving to another network.**

Q26. Should the LF and SUC applicable to the VNO be as per stipulated conditions of authorisation in UL? Or, should it be treated differently for VNO? Please quantify your answer with justification.

Our Response

Yes, LF should be applicable to the MVNO as per stipulated conditions of authorisation in UL at the same or higher level than the NSO.

However, no SUC should be applicable to the MVNO since it does not hold any spectrum.

A MVNO is re-selling the services of the NSO and a NSO is liable to pay LF and SUC on the revenue it earns from the services it provisions. Since, the NSO would have paid the LF and SUC on its revenue it has earned from the bulk minutes it sold to the MVNO, the MVNO should be asked to pay LF on its revenue after getting pass through on the payments made to NSO. Since the MVNO does not hold any spectrum, hence no SUC should be levied on the MVNO.

Our Recommendation

1. **LF should be applicable and levied, similar to or higher than the NSO, on the revenue earned by the MVNO but after getting pass through on the payments made to the NSO.**
2. **No SUC should be applicable to the MVNO since it does not hold any spectrum.**

Q27. Should an NSO be mandated to provide access to its network to a VNO in a time-bound manner or should it be left to their mutual agreement.

Our Response

Access to NSOs network to a MVNO should be left to the mutual commercial agreement between the NSO and MVNO as it is a purely commercial agreement between the two parties.

Q29. Who is to be held responsible for CAF verification and number activation, the NSO, the VNO or both?

Our Response

The responsibility for CAF verification and number activation should be of the operator acquiring the customers, i.e. a MVNO shall be responsible for CAF verification and number activation of the customers that he acquires.

It would be most appropriate for a customer if his CAF verification and number activation are undertaken by the operator from whom the customer is acquiring services. From security point of view as well it is desirable that the responsibility for CAF verification and number activation is with the MVNO itself. Since the MVNO shall be re-selling the services of a NSO, the MVNO shall have back to back arrangement, with the NSO, for activation of the numbers, after due verification, on its recommendations.

Our Recommendation

The MVNO shall be responsible for CAF verification and number activation of the customers that he acquires.

Q30. Should an NSO or VNO or both be responsible for maintaining QoS standards as per TRAI's regulations?

Our Response

The responsibility of maintenance of QoS standards should be that of service providing operator, i.e. a MVNO shall be responsible for providing quality services to its customers.

A consumer shall expect quality services from the operator from whom he has requisitioned the services. Since, a MVNO shall be the customer facing operator for the underlying NSO, therefore the MVNO should be the single window for customer services for the consumer. The NSO - MVNO arrangement being a commercial agreement between the NSO and MVNO; the MVNO in turn should have stringent SLAs with the NSO(s) for ensuring adequate QoS for the services for his customers.

Our Recommendations

The MVNO should be responsible for maintaining QoS standards, as per TRAI's regulations, while provisioning services to its customers.

Q31. How should Mergers & Acquisitions be dealt with in the VNO / NSO licensing model? Should the recently announced M&A guidelines issued by the Government for existing players be extended to cover VNOs? Or, should their M&A be treated separately?

Our Response

With the introduction of MVNOs there would exist multiple scenario for Mergers and Acquisitions for the MVNOs and NSOs. The guidelines which should be applicable for different combinations of MVNO and NSO M & A are as given in the table on the next page.

Type of M & A	Guidelines to be followed for M & A
NSO & NSO	M & A guidelines issued by the Government for existing TSPs to be applicable
NSO & MVNO	As per companies act & Competition law of the Country & only intimation to DoT to take on record.
MVNO & MVNO	

Our Recommendations

1. The recently announced M&A guidelines issued by the Government for existing players should be applicable for M&A of NSOs.
2. For the M&A of (a) NSO and MVNO and (b) MVNO to MVNO, Companies act & competition laws of the should be applicable

Q32. Should the VNO be treated equivalent to the NSO / existing TSPs meeting obligations arising from Tariff orders / regulations /directions etc. issued by TRAI from time to time?

Our Response

Yes, the MVNO be treated equivalent to the NSO / existing TSPs meeting obligations arising from Tariff orders / regulations /directions etc. issued by TRAI from time to time.

Q33. Please give your comments on any related matter not covered in this Consultation paper.

Our Response

LIM. It is suggested that the regulations should stipulate that the LIM requirement of any MVNO subscribers shall be handed over to the respective NSO under intimation to the requisite governmental agency.