CONSULTATION PAPER ON DELINKING OF THE LICENSE FOR NETWORKS FROM DELIVERY OF SERVICES BY WAY OF VIRTUAL NETWORK OPERATORS

RESPONSE OF ASIANET SATELIITE COMMUNICATIONS LTD

Q1 a) : Is there any need to introduce more competition in Service delivery by the way of VNOs in the sector? If not why not?

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

Since the Telecom industry is 20 years and common man needs better telecom services at affordable prices through more competition – especially in rural areas, allowing VNOs will help the consumers and will help the economy growth.

With Government's push for digital India, more service providers are needed to penetrate markets which are not served by the existing TSPs. At the same time, it is not viable to duplicate the network infrastructure. Hence VNO is the best option to increase telecom penetration in the country and also to provide new services like broadband.

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

While some VNOs may compete with NSOs in some services, there is an opportunity for both VNO and NSO for capturing the incremental business through incremental investments by VNO.

Eg: While NSOs may have core infrastructure and license, many NSOs (except BSNL and MTNL) did not invest much in fixedline telephony / broadband where a cable operator as an VNO could have helped both NSO and VNO to grow with strengths complementing each other.

In the 3G / 4G, the NSO may not be able to invest by themselves in the network infrastructure covering pan India in a limited time. Here, a few VNOs can extend the services to areas to places where 3G / 4G is not present.

3) How can effective utilization of existing infrastructure be improved? Can VNOs be a solution to achieve targets defined in NTP – 2012 for rural density?

As additional players come in through VNOs, and the prices drop further, consumption will increase which will lead to better capacity utilization.

As VNOs are likely to invest in less competition areas (like C class towns / villages) where NSOs have not ventured into, this will increase the rural teledensity and more importantly broadband penetration.

4) Does there exist a business case for introduction of VNOs in all segments of voice, Data and Video?

Yes.

In view of:

a) fast changing techonology in delivery of all services – voice / Data /Video delivered as data over intenet and
b) convergence to IP platform happening across all 3 services ,

there is no need for keeping out any service out of VNO.

Already, virtual / OTT players (like whatsapp, viber, skype) are delivering these services without license.

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

Since the VNO is being introduced as a new concept and license, all services may be allowed for the VNO licensee to explore the opportunities and expand which will help better utilization of NSO infrastructure.

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

While some TSPs in some markets may have constraint on infrastructure – both active and passive, the TSPs can augment their capacities with incremental investment, where the bottlenecks are faced by them.

With ever growing demand for bandwidth for all services, TSPs are continuously increasing their capacities for thei rown subscribers and VNOs will help the cause of utilizing the surplus capacity of TSPs.

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

Can VNOs build and own part of infrastructure?

a) The pricing terms should be non discriminatory and transparent.
b) The QOS for NSO subscribers and subscribers of VNO should be same and should comply with QOS benchmarks laid down by TRAI.
c) The agreement should not be exclusive. A VNO can tie up with multiple NSOs subject to technical constraints .
d) the agreement should last the license period of VNO. However, VNO should have an option of migrating to another NSO for better QOS / commercials.
e) TRAI may announce the pricing cap for services availed by VNO with NSOs. The pricing of NSO to VNO should be such that VNO should be able to compete with the same NSO in the market. i.e. NSO should not undercut the prices to its end subscribers to keep VNO out of business.

VNO should be allowed to build part of the infrastructure which should help in tariff of NSO to VNO.

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

Yes. VNO should be allowed to create its own infrastructure wherever necessary. This will help:

a) in extending the access to areas where NSO does not have a reach / does not want to invest.

Eg: VNO providing broadband service may have to extend fiber / co axial cable / set up radio access network.

9) Should Local Cable Operators or MSOs with Cable Networks be permitted to share infrastructure with VNOs to provide last mile connectivity?

Either LCO or MSO who has IP – I registration can be allowed to share the infrastructure like dark fiber with VNO.

Since coaxial cable is available abundantly with LCOs in the country –especially in rural areas VNOs may like to use this infrastructure of LCO / MSO. The current requirement of obtaining IP II license for providing end to end bandwidth is highly prohibitive at Rs.100 cr performance bank guarantee.

If entry barrier for IP II are removed, the cost of last mile access on Coaxial cable can be reduced considerably.

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 ?

It would be sufficient to append VNO license to UL license and allow the VNO licensee to choose the service the VNO would like to offer (all services / Access service / NLD / ILD / Internet Service etc)

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?

To avoid undoing the UL system which was introduced recently, it would be sufficient to add VNO license as a new category. Existing TSP licensees will automatically be NSOs for the VNOs, in addition to being TSPs under the license they have.

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?

A14. 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 ?

VNO license can be for National level as well as LSA level and the VNO will tie up with a suitable NSO who can cater to the VNO's requirement. A VNO can tie up with multiple NSOs depending on the license /coverage the NSO has.

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?

VNO's license tenure should be for 20 years so that VNO can plan for long term for investments and services.

Since the NSO's remaining license period may be less than 20 years (depending on when they got license) and some NSOs may also stop operations for financial / regulatory reasons or may not have good QOS, VNO should have option of tying up with primary and secondary NSO as a fall back option.

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.

As in UL, there should not be any restriction in number of licensees in a service area.

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

There should not be a limit on number of VNOs for an NSO. However, NSO should ensure that the QOS standards do not fall with more VNOs being served by them.

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

Since the NSO's remaining license period may be less than 20 years (depending on when they got license) and some NSOs may also stop operations for financial / regulatory reasons or may not have good QOS, VNO should have option of tying up with one primary NSO and secondary NSOs as a fall back option.

Q19. What should be the eligibility conditions for becoming a VNO?
For VNO model to be successful, the entry barriers need to be low compared to UL as suggested in reply to Q22.

Q20. **Whether an existing Unified Licensee with authorization 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 authorization to work as a VNO for delivering services for which it does not have access spectrum?**

The Unified Licensee should take a separate VNO license for providing a VNO service as the tenure of VNO will be different from the existing UL. There will be some terms which may be applicable to VNO which the licensee needs to abide with.

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

To avoid cartelization and misuse, the VNO should be treated as another TSP and the existing rules on cross holding should be applicable between NSO and TSP as well.

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.**

Since VNOs do not have network and are virtual in nature, to allow more VNOs, the financial obligations should be much lighter compared to that applicable for TSPs in UL. At the same time, the VNO policy should allow only serious players.

It is recommended to limit the finatical obligations at 10% of the current UL terms in terms of (a) Equity & Networth (b) Entry fee (c) PBG and (d) FBG.

Q23. **Should a VNO utilize 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?**

Licensor should allocate numbering resources to VNO rather than NSO allocating them to avoid VNOs being dependent on NSOs who at times may not co-operate in timely privision of the number system.

Q24. **What operational difficulties could arise in the above arrangents?**

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 utilized? Should any obligation be placed on VNOs for efficient utilization of resources ?**

To ensure that VNO utilized the numbering resources efficiently, the allocation can be made in smaller lots and additional resources allocated based on the subscriber base at the time of allocating additional resources.

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

For level playing field, the LF and SUC applicable to VNO can be the same as applicable to MNO.

A27. **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.**

NSO should be madndated to provide access to its network including interconnection and roaming to VNO in a time bound manner to avoid disputes and service related issues.

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?**

VNO should be allowed to facilitate MNP on its own and NSO shall support the same in all matters required technically.

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

Since the subscriber will be that of VNO, the CAF verification should responsibility of VNO.

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

For Technical / network related QOS, NSO should be responsible.

For QOS pertaining to billing and non NSO network related issues, VNO should be responsible.

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?

The relevant points as per guidelines on Mergers and Transfers issued by DOT dated 20/2/204 can be made applicable for VNO licensees too.

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.

Yes.

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

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