

TRAI's Consultation Paper on Mobile Virtual Network Operator (MVNO)

Tata Teleservices Limited & Tata Teleservices (Maharashtra) Limited's Point -wise reply to the issues raised in the above mentioned Consultation Paper

Issue 1. Do you agree with the definition of MVNO given in section 2.1.6? If not, please suggest an alternate definition with justification

MVNO has been defined by different organisations but considering the Indian Telecom scenario, the proposed definition of an MVNO given in section 2.1.6 is:

"MVNO licensee is an entity that does not have an assignment of spectrum for Access Services (2G/3G/BWA) but can provide wireless (mobile) Access Services to customers by sharing the spectrum of the Access Provider (UAS / CMTS licensee)"

However, TTSL would like to suggest the following definition of an MVNO:

"MVNO licensee is an entity that does not have an assignment of spectrum for Access Services (2G/3G/BWA) but can provide wireless (mobile) access services to its own customers under its own tariffs and own terms and conditions of service by sharing the spectrum of the Access Provider (UAS / CMTS licensee)"

The definition of an MVNO has regulatory and commercial implications, and it is important that the definition used should not mandate an inefficiently high level of infrastructure investment to qualify for MVNO status. Ultimately, commercial negotiation should determine where an individual MVNO sits on the spectrum of partnership options between MNO and MVNO, as depicted below (Exhibit 1)

Exhibit 1: Options for split of function between MNO and different types of MVNO in providing mobile access services

Function	Examples	Full asset-based MVNO	Slim asset-based MVNO	Customer ownership based MVNO
Network	Spectrum, backhaul	MNO	MNO	MNO
Network facing IT	HLR, IN, MSC, VAS platforms	MVNO	Either	MNO
IT	Billing, CRM, ERP	MVNO	Either	MNO
Operations	Handset procurement, care, distribution, marketing, NPD	MVNO	MVNO	MVNO
Brand	Brand used for services	MVNO	MVNO	MVNO
Customer ownership	Ownership of customer	MVNO	MVNO	MVNO

Mandating a minimum level of physical infrastructure to qualify for MVNO status (e.g. in Ireland, it is required that to qualify as an MVNO, the entity must operate at least some

physical infrastructure, at a minimum MSC, HLR, authentication centre and its own SIMs and MNC), is limiting of alternative commercial agreements between MVNO and MNO that could maximise shared value.

The definition of MVNO given in section 2.1.6 could be read as defining an MVNO that would share spectrum with their host MNOs, implying (if the definition of Access Services used here is analogous to that of Unified Access Services in the license) a responsibility for rolling out their own radio access network (RAN) infrastructure to provide Access Services to their customers. To avoid the risk that this could (even at some later date) not include the structures shown in Exhibit 1, our view is that the definition needs modifying as per the changes highlighted above. Our suggested definition for an MVNO also emphasises that ownership of the Customer must lie with the MVNO, with the MVNO having consequent responsibilities for tariffs and customer terms and conditions of service.

Issue 2. Do you think there is a need to introduce MVNO in the Indian Market? If yes, is it the right time to introduce MVNO as a distinct service provider with its own licensing and regulatory framework?

Launching of MVNO should be seen in context with the following key elements:

- ❖ Consumers can take advantage in terms of reach, quality and cost of services
- ❖ Healthy competition scenario is created
- ❖ Sustained growth in the sector can be maintained

Although there is a healthy competition in the Indian telecom sector, there is still very low telecom penetration in many areas such as rural areas. Also, the increasing tele-density of the country has still not been able to bridge the ever increasing Digital Divide.

In view of the above, MVNOs can be leveraged to address such specialized market segments. It will not only benefit the consumers, but also help maintain the growth in the telecom sector. Therefore, MVNOs should be allowed in the Indian Telecom Market. We believe that MVNO would help in increasing teledensity of the country besides furthering the range of customised products & services to the end consumers. The advantage of MVNO would be that they will not require spectrum to be allocated to them by DoT. As a result further competition will emerge in the market. Increased competition will induce reduction in prices and will lead to the end customer being benefited.

We recommend that the MVNOs should be governed by a license from the DoT.

Issue 3. To what extent should the MVNO be permitted to set up their own infrastructure?

MVNOs should be allowed freedom within the scope of the definition of an 'MVNO' to establish their own infrastructure. This would ensure that businesses are able to maximise the efficiency of their respective circumstances to provide a differentiated, value-additive service to their customers.

India is in the initial stages of the evolution and entry of MVNOs and therefore, the aspect of terms of setting up/sharing of infrastructure should be left to agreement between MNO and MVNO. While some MVNOs operate their own core network infrastructure including switching, Home Location Register (HLR), billing, customer care,

value added services platforms and intelligent network systems, other MVNOs simply repackage network operators' services and issue their own SIM cards and tariffs and service conditions by relying almost completely on the host network's facilities with a little product differentiation.

The DoT allows the active infrastructure (except spectrum sharing) and passive infrastructure sharing. It is observed that in many of the cases, MNOs out-source its non core activities like billing, customer care etc. In such a scenario, the decision of setting up one's own infrastructure should be left to MVNO and the market forces.

Issue 4 (i): What Regulatory Model should be followed for MVNO in the Indian context? (ii): What kind of obligations may be imposed on MNOs so that MVNOs are implemented effectively in India benefiting the customers?

India should follow a 'light-touch' regulatory regime that avoids excessively regulating MVNO and MNO relations. This would entail development of MVNOs through commercial negotiation rather than regulation, and no mandating of wholesale or retail prices.

As submitted earlier, MVNOs should be governed by a License by DoT to ensure entry of serious players only, however decisions on whether to have a MVNO and on what commercial terms and conditions should be left to the MNO.

The relationship between MNO and MVNO is a commercial one with complex incentives. Unnecessary regulatory involvement often distorts these incentives for both parties, requiring additional legislation to ensure that this distortion does not impact the working of the market. For example, where MVNO access is mandated by law, either strict definitions for MVNOs also result, which effectively require minimum investment spend to prevent speculative entry (such limiting definitions may reduce efficiency and discourage tariff innovation), or the market becomes overwhelmed by new entrants, the majority of which do not survive (creating instability in the market). As another example, the mandating of price means that MNOs resist offering attractive wholesale rates to potential MVNOs which could benefit both parties, as they are compelled to offer such deals to all, including where a business case is not justified.

Experience in other markets indicates that where markets are competitive, MNOs have sufficient incentives to voluntarily provide network access to MVNOs.

Issue 5: What should be the eligibility criteria for MVNO?

Eligibility criteria for MVNOs should be set in place to ensure that the market is not destabilised by too many speculative entrants with unsustainable business models and at the same time there should be an enabling regime to encourage the MVNOs.

Criteria for MVNOs should be:

- 1) financially stability/ networth/paid up capital
- 2) extensive experience
- 3) they are able to meet other regulatory requirements expected of MVNOs

MVNOs should be expected to prove that financially they are stable ongoing concerns able to support service agreements with their customers. This would be analogous to the net worth requirement for MNOs, and could be set at a level of 100 Crores.

Finally, MVNOs should have joint responsibility with their host MNOs for meeting the regulatory requirements of mobile operators such as ensuring compliance to all the Regulations/Directives/TTOs issued by the Regulator and the Licensor from time to time,

Issue 6: Do you suggest different eligibility criteria for different MVNO models and regulatory frameworks?

No. Definitions of different MVNO models are too diverse and fluid, with companies able to move from one to the other both before and once launched. Attempting to regulate according to MVNO model would prevent companies from adopting the most efficient combination of insourcing and outsourcing for their service and customer base and adds unnecessary complexity to the regulatory process.

A MNO should also not be permitted to become an MVNO if it is going to lead to the emergence of a dominant operator with Significant Market Power, by owning customers both as a MNO and MVNO.

Issue 7: Should there be any restriction on the number of MVNOs attached to the MNO?

There should be no restriction on the number of MVNOs that an MNO should be able to support. It should be left to the market forces and opportunities that will drive the business viability of any particular MVNO & MNO. MNOs and MVNO should be allowed to decide on their perceived business opportunities or number of areas they want to engage with this model.

Since the key unique service proposition that an MVNO has is its ability on addressing niche segments that are difficult to cater by MNOs. This not only improves the capacity utilization of that MNO but also increases the telecom penetration in areas where the network coverage has already been there but still some small segments were left out of the telecom service offerings.

Issue 8: What should be the commercial model / framework for spectrum sharing by MVNO: w.r.t. (i) Department of Telecom and (ii) MNO?

Unless the MVNO is 'sharing spectrum', i.e. has its own RAN network, it has no direct usage of spectrum and therefore all spectrum relationships remain as per MNO regulations. However, the MVNO's customers should be counted toward the MNOs subscriber base for the purposes of additional spectrum apportionment, as not doing this could lead to significant network quality degradation for larger MVNOs and their host MNOs and effectively prevent market development.

Issue 9: What should be the service obligations of MVNO? Please list them with justification thereof.

The service obligations for a service provided to an MVNO's customer should be based on the service obligations imposed on a service provided to an MNO's customer. The requirement from TRAI should be that MVNOs and their host MNOs need to

demonstrate that under their structure and commercial agreements, all service obligations are met.

Exhibit 3: Illustrative split of obligation between MNO and MVNO for Example MVNO A

Obligation	Billing	Customer care	National security requirements	Quality of service	Access to emergency services	Subscriber verification	Directory services	Number portability	Controlling of unsolicited commercial communication	Tariff
Example MVNO	MVNO	MVNO	MNO with support from MVNO	MNO	MNO with support from MVNO	MVNO	MVNO	MVNO with support from MNO	MVNO with support from MNO	MVNO

As MVNOs do not generally own their own networks, they cannot be responsible for all the service obligations that an MNO is, and there should be flexibility in the commercial arrangements between MVNO and host, with no pre-assumed split of functions. Exhibit 3 illustrates how each service obligation may split in an example MVNO / MNO relationship, though variations should be permitted provided that all regulatory requirements are met either by the MNO or the MVNO, or jointly between them.

The DoT as part of the guidelines under MVNO license conditions must mandate that MVNOs provide the MNOs with their data encryption key for facilitating and ensuring Lawful Interception and monitoring of calls at all times.

Issue 10: What should be the method and consideration for determining the entry fee for MVNO?

As an MVNO does not receive an allocation of spectrum prior to service launch, it should be exempt from payment of the entry fee. Instead, we support the MVNO paying a licensing fee through the AGR, which acts as an ongoing payment for the right to sell telecoms services.

Eligibility requirements for MVNO licence-holders as suggested in Response 5 should act as a sufficient barrier to entry for speculative entrants, without requirement for this additional cash fee.

Issue 11: What should be the definition of AGR for MVNOs?

It is reasonable that MVNOs should pay the same proportion of their revenue to the government as MNOs. The determination of percentage of revenues paid out as AGR for MNOs is linked to their spectrum holdings and therefore varies. MVNOs' AGR should equal, as a proportion of revenue, the AGR charged to their host network. The definition of AGR should be the same as that of the host network (i.e. based on gross revenue net of PSTN-related call charges paid to other access service providers / roaming charges and service tax / sales tax paid to the government).

In the specific case of the MVNO, the definition of PSTN-related call charges should include charges paid to the host MNO for airtime. (i.e. AGR to be based on revenues net of airtime costs, which is ~40% of revenue received from consumers, rather than 100%, because 60% of revenue is paid to the host MNO for the airtime). This would prevent double-taxation of the same minutes (once of the MVNO's gross revenue, and once of the host MNO's wholesale minute revenue). It would also increase the sustainability of the MVNO business case by reducing the tax burden faced.

Note that as a general comment on the AGR, the inclusion of handset revenues in the definition of gross revenue creates a requirement on operators to outsource handset operations, as these revenues are, in practice, losses net of cost. Managing a handset outsource relationship may impose too great a burden on a start-up MVNO, and therefore act as a barrier to entry. All unrelated revenues need to be excluded.

Issue 12: What is the best way to protect the subscribers both in terms of continuity of service and applicability of tariff plan:

- (i) in case of a dispute between MVNO and MNO?
- (ii) In case MVNO wants to exit the business

There already exists a legal requirement under consumer legislation to deliver services paid for, which provides some protection. Beyond this, MNOs should have responsibility for providing continued service to existing MVNO subscribers on their network when the relationship breaks down / MVNO exits the business. This should help to ensure strong, sustainable contracts between MNO and MVNO.

Issue 13: Should there be any roll out obligations specified for MVNO? If yes, what should be the penal provisions for failure / delay in fulfilling the obligations

No. MVNOs should have eligibility criteria as cited above in Responses 5 and 6, as any company meeting eligibility criteria would have to achieve minimum scale to justify investment. Beyond this, potential MVNO structures are too diverse to limit in this way. Even where an MVNO intends to roll out a limited RAN, roll-out requirements should not be necessary as they are already in place for the host MNO.

Issue 14: What shall be the specific guidelines on the Mergers and Acquisitions of MVNO? Please elaborate the comments with appropriate reasoning.

There should be no specific constraints or requirements beyond the existing M&A legal / regulatory requirements, with the exception that limits should be placed on the purchase / cross holding between an MVNO on network A, and the MNO of network B. (see Response 15 for further detail)

Issue 15: Should there be any restriction on cross holdings between two MVNOs and between MVNO and MNO in a service area? Please comment on the nature and scale of restructuring.

There should be no restrictions on cross holdings between two MVNOs. By their nature, MVNOs are niche plays, and therefore unable to exert a significant degree of market impact even if a number are combined. Furthermore, restricting cross holding would prevent future market consolidation as the market matures.

There should be almost no restrictions on cross holdings between MVNOs and MNOs, except in the case referred to above (Response 14) between an MNO and an MVNO on another host network. In this case, MNOs should not be able to own >10% of any MVNO operating on another host network as this could effectively lead to network control via the back door. Beyond this, cross holding between MNO and MVNO has produced some of the strongest, most stable MVNOs in markets where this has occurred. (e.g. Telmore (TeleDanmark); Boost (Sprint / Nextel))

Issue 16: What should be the FDI limit for MVNO?

In order to maintain consistency throughout the telecoms sector, and facilitate MVNOs offering converged services as well as simple voice, the FDI limit should probably be set at 74%, and should increase to the extent that this changes for network operators.

Issue 17: What should be the quantum of FBG and PBG for MVNO?

FBG and PBG are linked to spectrum ownership and roll out requirements. These are not relevant to MVNOs. Therefore, FBGs should not be required and applying them would disadvantage MVNOs (and increase barriers to entry) through additional unwarranted costs.

Issue 18: Any other relevant issue you would like to suggest / comment upon.

We are of the opinion that given the existing crunch in the Numbering Scheme, the existing Numbering Plan would not be able to support many MVNOs and feel that the TRAI should also address the issue of the Numbering Plan while allowing MVNOs.
