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Kind Attn: Mr. N. Parmeswaran

Sub: Response to Consultation Paper on Mobile Virtual Network Operator (MVNO)

Ref: TRAI Consultation Paper No.9/2008 May 05, 2008

Dear Sir,

BT is grateful to TRAI for bringing out the consultation paper on introduction of MVNO in the country. Though, being a long distance operator in India, BT is not directly involved in provision of voice services to end users in India, the general concept of introduction of resale in Indian market in all segments of telecommunication and also the establishment of framework of wholesale pricing is very important to BT Global Communications (BT) as a new entrant in NLD, ILD and ISP domain. BT is very supportive of the general intention of liberalization of telecommunication in India and always welcomes the light regulatory obligations on resellers and new entrant in the interest of growth of competition for the benefits of customers at large.

1. Foreword

This consultation is a step in the right direction towards further opening the market by allowing third party non-facility based service providers to provide mobile services by accessing and through the infrastructure of existing licensed Mobile Network Operators (MNO).

BT welcomes in particular the proposal of TRAI to adopt a wide and broad based definition of MVNOs which would allow market entry by providers operating under completely different business models, encompassing potentially pure resellers of mobile services, full MVNOs, application providers etc. The term MVNOs is being used in this submission with the same wide broad based meaning.

We agree with the view expressed by many in the market that the market is ready for the introduction of MVNOs in India. The main issues which we feel are important and as mentioned in our responses are around :

- Specific conditions for MVNOs market entry, licensing and licence fees, service roll out obligations etc
- Nature of access requirements in favour of MVNOs imposed on the host MNOs.
- Need for a general wholesale pricing framework.

2. Need to address barriers to entry

As detailed in our answers to the consultation being critical for the success of MVNOs in India it is important that:

1. Entry costs associated with licensing and regulation of MVNOs are kept reasonably low in order to ensure that this does not become a disincentive to market entry. We would respectfully disagree with the TRAI stated intention to set eligibility and other entry criteria at such a level to only attract “serious market players”, where the notion of what a serious market player in an innovation driven service industry seems inappropriate and back-ward looking.
2. We sincerely believe that it should be left to the market to dictate the success of a market entrant, artificial barriers erected at this stage may mean that significant opportunities for innovation and competition may be lost at detriment of the Indian economy. MVNOs may not necessarily focus on selling traditional legacy mobile services (eg switched mobile voice and SMS) but also introduce new applications and services (in particular IP/data applications some of which may be dedicated to particular segments of the market, in particular in the Enterprise/Corporate space). For such reasons TRAI should attempt to ensure that small and larger players are given an equal opportunity to enter the market and any apriority intention as to who should be allowed to innovate or not appears to be unnecessary at this stage.
3. Access to mobile network should not be left to pure commercial negotiations. Our experience shows that absence of any form of regulatory oversight on access agreements either do not materialise and/or the agreed terms and conditions do not allow viable competition to emerge. TRAI should at least provide itself with the ability and right to intervene to solve access disputes where they may emerge. We shall note that even in Europe where MVNOs (in the wider sense of the notion) have existed since the late 90s:
 - a. Out of 27 countries surveyed in Europe,
 - (i) MVNOs based on free commercial negotiations exist in only 7 countries,
 - (ii) no MVNOs (of any shape or form) exist in 10 countries in the absence of any regulation surrounding access to MNOs, and
 - (iii) in the remaining 10 countries MVNOs exist because of past regulatory intervention (but with full MVNOs not commercially implemented in a number of them).
 - b. Even where access in favour of MVNOs was secured via regulatory intervention it is widely known that access conditions remains sub-standard at best as in no country in Europe the regulator has intervened to regulate terms and conditions of access to mobile networks.
 - c. We think that for this reason it would be useful to note the case of Spain which was not mentioned in the TRAI consultation paper. In Spain the regulator introduced a new licensing regime for MVNOs in 2002 but in absence of any obligation for MNOs to provide access no MVNO entered the market until late 2007 following a decision of the Spanish regulator that found existing MNOs as holding a position of joint dominance in the market for access and call origination on mobile networks which was at

the basis for the imposition of an obligation for MNOs to offer access to prospective MVNOs on fair terms.

The latter two points are very important considering that TRAI's intention is that of facilitating not just market entry but also to encourage effective competition at all levels.

3. Looking beyond MVNO access

Access in favour of MVNOs, or more in general wholesale access to mobile networks in favour of third party providers (which could be application providers seeking to bundle legacy mobile services with new applications, simple resellers of mobile services, full MVNOs etc) is extremely important to ensure competition on an equal footing between MNOs and fixed operators alike in particular as speed of convergence and/or substitution between fixed and mobile access platforms takes place in the market.

That said BT also would like to stress that with the emergence of NGN and the convergence of mobile and fixed networks into all IP platforms the notion of access to networks blurs with that of interoperability as the requirement to interface networks to ensure any-to-any communications and the provision of seamless services and ICT solutions across different access networks becomes popular.

This is particularly important in the corporate and large enterprise segments where the customers' corporate networks are increasingly becoming IP enabled and where the use of remotely located applications and systems (often shared with all parties to the same end to end production process) are increasingly becoming the norm to gain efficiencies and leverage on ICT as a productivity enabler and competitive tool.

While fixed networks in many parts of the world are moving toward fully IP based Next Generation Networks, delivering and developing innovative services, the mobile sector seeks to protect its legacy services (i.e. voice, wireless data and SMS); preventing innovative players from challenging existing business models by not just denying access to their own access networks (such as access for an MVNO/mobile resale) but also by barring their users access to third parties' IP based applications and clients through artificial commercial and/or technical barriers that affect service interoperability and ultimately access to competing services.

Whilst some restrictions introduced by the MNOs can be understood from the perspective of needing to manage traffic over physically constrained wireless bandwidth, e.g., restrictions on peer to peer traffic, other restrictions however are clearly designed to promote the mobile provider's own products and exclude competitors.

BT strongly believes that access and interoperability are key building blocks of convergence and effective competition in this market and most of the regulatory issues currently faced are linked to access and interoperability issues and requirements. Although converged services remain an emerging market, these issues remain critical for the development of competition and service innovation. This phenomenon is also true for India.

It is being widely recognised that with the emergence of dual band WI-FI and GSM/GPRS/3G devices the provision of services using a single device can be either part of an integrated MVNO + fixed integrated play or be MNO agnostic. Agnostic means in this case that access to an independent service provider's converged platform is independent of the control by the latter of the commercial relationship with the end user for the provision of the mobile service component.

However the level of integration of services and functionality even in the case of an MNO agnostic solution by a third party service provider depends on :

1. the ability to "interface" and/or access a number of facilities controlled by the MNOs such as the HLR, the location server and signaling for efficient routing, the IN SDP (which implements the services/functionality like call-divert, change of tariff, prepay call control) for service replication and control.
2. the right to install and develop call clients and other applications used to provide access to operators service platforms (eg a VoIP client, clients for remote solutions for so called "Field Force Automation", remote access to intranet/extranets, telemetry services etc) and fully interoperate with the operating system on devices supplied by the MNOs

It is also noted that the ability to provide to mobile end user access to such service platform remotely without suffering service quality discrimination/degradation and/or commercial obstacles (eg price discrimination and/or excessive pricing for data plans for instance) by MNOs is required.

BT would like to mention that a number of operators in the UK, rest of Europe and the US have taken early steps in the past to prevent independent application providers from

- Installing clients (eg for VoIP) on mobile handsets by disabling key functionalities on them (eg WI-FI functionality)
- Contractually barring their users from accessing third parties service platforms
- Obtaining suitable jitter and latency parameters on their networks for communications destined to third party platforms to affect quality of service for example of VoIP calls not managed by the MNO itself.

It is our view that TRAI should not just tackle artificial obstacles likely to be erected by MNOs which de facto block access to third party services and platforms by artificially constraining access and interoperability, barring any-to-any communications and/or discriminating between service providers, but it should also look at removing artificial regulatory barriers that may impede the development and deployment of fully converged IP solutions that work and can be equally accessed from mobile and fixed networks.

In the above background, BT's comments on the issues for consultation raised by TRAI are given as following:

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

BT agrees with the definition of MVNOs proposed by the TRAI. It is our understanding that the TRAI wishes to adopt a definition of MVNO that encompasses various forms of independent service provision, and namely "ESP/thin MVNO", "intermediate MVNO" and "Full MVNOs". BT's view is that under the definition adopted by the TRAI all forms of independent service provision will be allowed including simple resale of mobile services under so called agency arrangements as under the proposed definition by TRAI an ESP/thin MVNO is one that provides "billing, customer care, distribution, marketing and branding and sales" only.

The overall definition provided for an MVNO is very generic and we agree with this approach. The TRAI rightly believes an MVNO would be considered "*an entity that does not have 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)*".

In terms of the model for MVNOs in India we support the view that MVNO should include the widest range of access models from agency/pure resale to full MVNOs.

We think it is critical that access is not granted to so called MVNOs only but also to other third party providers not requiring a formal and deep access interconnect, eg such as simple resellers and operators requiring to be able to act as a simple agent in order to be able to bundle a mobile service to a wider service offering and supply a combination of services under composite single billing arrangement.

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

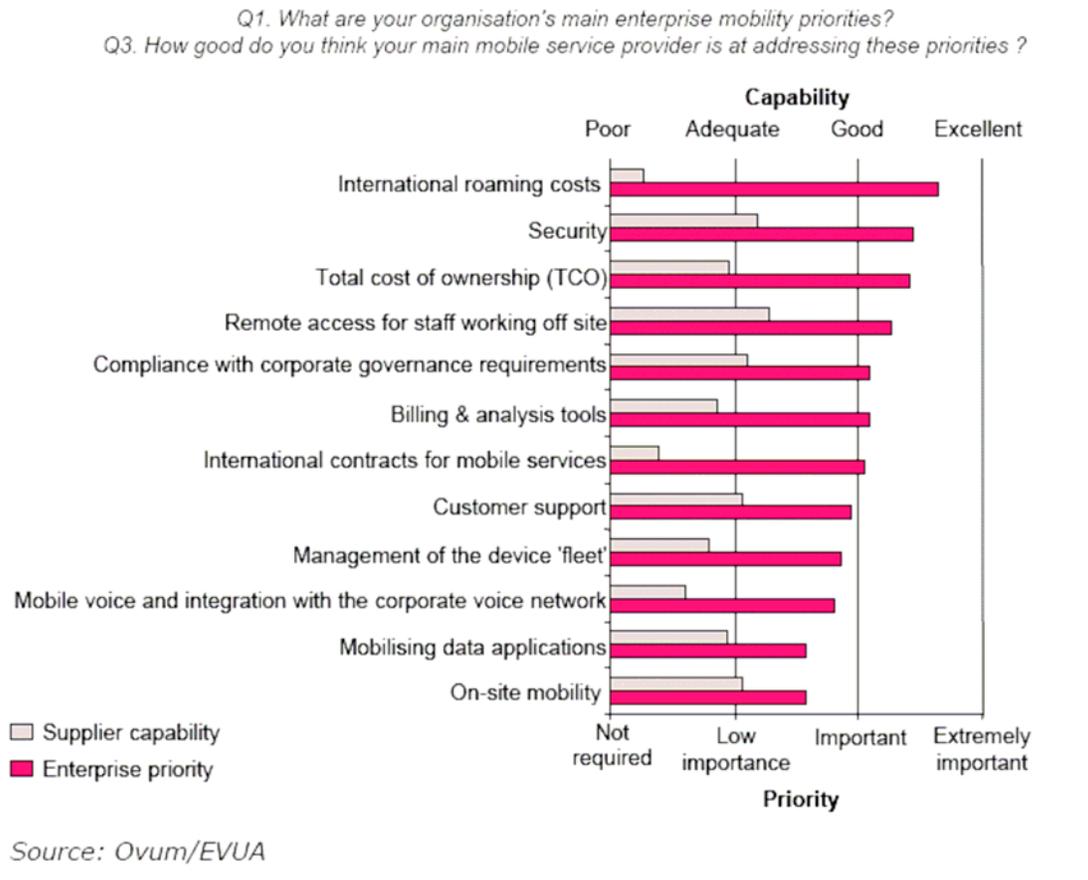
BT is aware that the issue of market entry by MVNOs in India has been widely debated already in public with great interest. As shown by the experience in many other countries where MVNOs (in the widest sense of term) have been introduced, the introduction has translated in both lower prices and innovation, with MVNO access having become a component of converged service provision in many markets already.

Arguments against the introduction of MVNO are usually centred around the need to protect investments made by existing MNOs and the need to favour a policy which is centred around network based competition. Once again experience shows that the market positively benefits from the introduction of MVNOs and increased competition and that benefits more generally outweigh any perceived detrimental effects.

In particular third party providers usually are in a position to serve untapped areas of the market and to bring innovation in particular segment where specific competencies are required. The latter could be the case of the corporate sector which is currently "underserved" by MNOs when it comes to the provision of so called "international mobile

services”, this is true at least in Europe for so called pan European mobile services but we believe in most markets around the world.

In a recent survey of large business users across Europe produced by Ovum and user group EVUA, when asked to what extent MNOs met the organisations’ need for pan-European mobile services a rather negative picture emerged as depicted below.



As noted above the business needs for improvement are incredible and whilst MNOs may not have an incentive to do so, many of these areas will benefit from the introduction of further competition in the form of independent application providers and MVNOs.

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

We believe that MVNOs should have the freedom to decide the depth of network investment they need which in turn affects the type of access required from the host MNO.

We think it is important that the regulatory framework in India should not attempt to restrict the boundaries of the MVNO business model by pre-defining and or limiting the type of network investment that MVNOs can and/or should make. This in turn will in fact also pre-define the type of access agreements that must be sought by an MVNO with a prospective host MNOs.

Different operators may respond and prefer different business model and may have completely different own-network requirements, and the regulation should not preclude market entry to any predefined type of operators.

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 Mobile Virtual Network Operations are implemented effectively in India benefiting the customers? Please elaborate the comments with appropriate reasoning.

The model that should be implemented in India should be a model that takes the best out of experiences in other countries where MVNOs have been implemented, avoiding known mistakes hence maximising benefits for the economy and the end users.

As has been mentioned earlier it is important that:

1. Artificial regulatory barrier are kept to a minimum so that large and small entrant can equally enter the market and innovate.
2. Thoughts should be given also to the need to remove any existing regulatory restrictions which may hinder the ability of some MVNOs to innovate, in particular where mobile access is used for the development of innovative IP based converged services.
3. MVNOs are not likely to succeed in India in absence of some form of ex-ante regulatory intervention and/or oversight as MNOs may be reluctant to offer access and/or offer access on competitive and non-discriminatory terms. For such reasons we believe that there should be an obligation for MNOs to at least negotiate in good faith and respond positively to reasonable request of access whilst at the same time TRAI should have the right and powers to intervene to resolve access dispute in all those cases where the parties fail to reach mutually agreed commercial arrangement.

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

We appreciate that the TRAI intends to define as to what eligibility criteria should be used for MVNOs, such as (i) telecoms expertise and/or (ii) minimum net worth and paid up equity capital for service areas.

From the consultation paper we understand that in the case of full MVNOs the TRAI may be tempted to use the same eligibility criteria used for MNOs whilst it may relax these down in case of lighter forms of MVNOs.

If so in the most attractive circles a full MVNO may be required to have a paid up capital of approx 12m GBP (100 Crores) for each top circle/service area it wishes to operate in (Delhi, Mumbai, Kolkata, Andhra Pradesh etc) and up to 3.7m GBP for the less expensive circles/service areas (Assam, Bihar etc) and up to approx 10m GBP for others (Gujarat, Kerala etc).

We understand also that the TRAI may like to suggest a system where paid up capital requirements may be reduced for lighter forms of MVNOs. It is also clear however from the consultation document that the TRAI wishes to use this instrument as an instrument to make sure that only serious players come into the market albeit without becoming a disincentive to market entry.

As noted earlier we think that in order to ensure effective competition by MVNOs, the TRAI should avoid following the same approach for eligibility criteria as used in case of MNOs. If same eligibility criteria are however to be used we think that the TRAI should carefully consider whether it is appropriate to set this at level which are comparable to those imposed on MNOs. BT does not think that a system of eligibility criteria for MVNOs that mirrors the one applied to MNOs would be appropriate, nor justifiable and will definitely become a deterrent to market entry or the key contributing factor to market entry failure in the medium term.

Whilst a decision to set different eligibility criteria for different types of MVNOs may sound attractive on paper we don't think it would be manageable as well as appropriate. It may force the TRAI to try and objectively justify at what stage one should pay more but in particular find objective justifications for that. This may artificially hamper the transition process from one form of MVNO investment to another creating uncertainty and a system of investment micro management by means of regulation that may adversely affect investment as well as innovation.

Issue 6: Do you suggest different eligibility criteria for different MVNO models and regulatory frameworks? If Yes, Please suggest with justification thereof.

Please see response to the previous question (Issue No.5)

Issue 7: Should there be any restriction on the number of MVNOs attached to an MNO? Please elaborate the comments with appropriate reasoning.

There are no reasons for artificial restrictions to the number of MVNOs attached to a single MNO to be imposed. Experience shows that MNOs are capable of handling multiple MVNOs and there are known cases in Europe of MNOs hosting 10+ independent service providers (MVNO).

Nevertheless, alleged capacity constraints are often used by MNOs to refuse access, although in some cases such concerns may be objectively justified, these very same concerns are and can be tackled commercially as part of the agreement between the parties so are often likely to be a non-issue.

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

BT has no comments to offer on this at this stage.

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

BT does not have a view about specific service obligations to be imposed on MVNOs. As already noted however obligations should be kept to a minimum in order to ensure that these do not translate into an artificial barrier to entry or increase the cost of provision of service.

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

We note that as in the case of the eligibility criteria the TRAI in the consultation document does not appear to suggest at what level it should set. However the TRAI clearly states that it wishes to set it at a level that would discourage non serious players.

As mentioned before we suggest that the TRAI to refrain from using eligibility criteria as well as entry fees as an instrument to dictate who should be allowed to enter the market. This in return will affect the type of business models implemented and the type of innovation.

For this reason any entry fee (and equally eligibility criteria) should be set at lower levels similar to those set for other Value added service providers such as ISPs etc rather than mirror the requirements set up for the MNOs

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

We note that the TRAI wishes to set the annual fees as a 6%, 8% or 10% of the Adjusted Gross Revenues of the MVNOs (based on the circles they are operating in), at par with that applicable for MNOs.

Under the current used definition adjusted means after deducting from gross revenues PTSN related charges paid to other operators, roaming charges and tax charges.

BT believes that in the case of an MVNO all wholesale costs incurred with the host MNO should be fully deducted for calculation of AGR as it will result into double taxation on the same product. Similarly there is a case for using this concept also for other resellers like Bandwidth.

BT would though like to mention again that licence fees especially the USO component (of 5%) applicable on all telecom services remain generally very high in India and needs downward revision across the board.

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.

This appears to be a complex area to deal with and is usually best tackled by the parties through their contractual arrangements.

The access contract between the MVNO and the host MNO should always include provisions on transfer of the customer base at the end of the contract and the formula which must be used to evaluate the value of this. The MVNO should have the right to transfer the customer base also to another MVNO who also has an access agreement with the host MNO.

There should not be an automatic obligation for the host network to continue to provide service to all end users at the end of the contract with the MVNO and at the same terms and conditions offered by the MVNO, but rather the parties must have agreed a process to ensure that customers are notified on time as to what their options are before the agreement between the MVNO and the MNO is terminated. Customers who wish to be ported to another MVNO and/or MNO should also be allowed to do so.

We would expect existing contract law and any existing rules designed to protect consumer interests to provide protection and redress to those customers who may be affected by an interruption of service following a dispute between their MVNO provider and the host MNO.

That said we reserve our views at this stage.

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.

We do not think there should be any specific roll-out obligation for MVNOs. This would go against the fact that MVNOs may not be required to build any infrastructure at all and also are often likely to target specific segments of the market .

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

BT reserves its answer to this question as the issue is more about the more general issues surrounding the implementation of competition law principles in India, the regulations for which is yet to be published. That said at this stage we would like to stress that in general we believe that there is no reason for adopting a given approach for MVNOs/ MNOs that differs from the approach taken in dealing with market concentration issues in other industries and market segments.

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

Please see our answer to Issue No.14 above.

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

We understand that TRAI has various options and the consultation paper indicates that a 100% foreign ownership for MVNOs may be possible. This level of FDI is also permissible for some other value added service providers like OSPs and also IP-1 category. As MVNOs will be more like resellers and value added service providers there appears to be no justification for putting any restriction pertaining to FDI limit for them.

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

BT has no comments on this point at this stage.

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

We do not have any further comments to make at this stage.

In summary, BT would submit that there is a strong case for introduction of MVNO in India to permit unhindered value added resale as well as liberalization enabling provision of managed network and wholesale services.

We would welcome the opportunity to discuss our comments with the TRAI and would welcome the opportunity of further contributing to the development of the regulatory environment in India to enable further competition and innovation through general wholesale and resale framework.

Yours sincerely,
For BT Global Communications India Pvt. Ltd.

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