



CONSULTATION PAPER

ON

Review of Mobile Virtual Network
Operator(MVNO) Framework

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1 Introduction

Mobile Virtual Network Operator (MVNO) is an operator that does not own spectrum but have business arrangements with conventional Mobile Network Operators (MNOs), who buy minutes of use (MoU) from the MNOs for sale to its own customers.

The MVNO business started in year 1999 and now there are over 100 around the Glob. Since limited spectrum is available for MNOs, there can only be a small number of operators (MNOs) in each region/country. However, anyone else wanting to enter the market may purchase capacity from MNO for reselling and become an MVNO.

The Authority, keeping in view clause 6.12 of cellular mobile policy 2004, issued MVNO Framework on March 20, 2006 for implementation be mobile operators. The MVNO Framework was prepared in consultation with all cellular mobile operators and the Ministry of Information Technology. The MVNO Framework was framed such that it does not disturb the market that was highly competitive and where the operators were lacking network capacity. Now, keeping in view the changed scenario and clause 2.10 of the framework, the same is under review.

2. WORLD PRACTICE ON MVNO

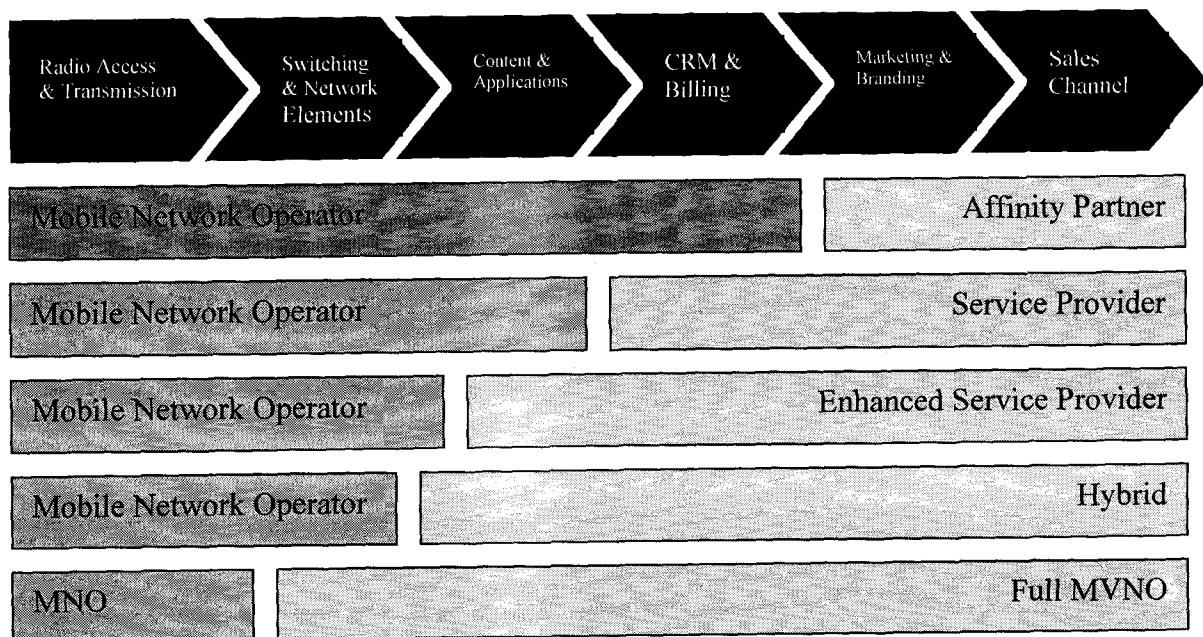
As wireless services expand their worldwide stronghold, these wireless service providers operating in developed economies like Japan, South Korea, and Western India which have reached or are very close to cent percent mobile penetration are already seeing decline in revenue growth. As the profitability is under tremendous pressure due to demand saturation, and increasing competition service providers are diversifying into wireless data and other innovative differentiator services. One such innovation has been the emergence of Mobile virtual network operators (MVNO). One of the best examples of this is Virgin Mobile UK not only because it was first but also one of the leanest and successful MVNO with having just the brand name and different customer care number. MVNO was successful with just innovative pricing, value added services and different customer care provisions and by this they managed to come first twice and its host operator worst despite its product and Network. Now, there are over 100 operational MVNO

worldwide. Most of the MVNOs are in Europe, USA and Australia with major share lies in USA. Moreover, MVNOs are popular in highly competitive and developed markets that have appreciable growth and enough capacity. ValueFirst (India) is another example who empowers its customers to communicate between varied IT back-end systems and mobile phones using SMS Software/ API Services. ValueFirst provides a unique, end-to-end, global carrier-grade mobile data service. Its mobile data service offering includes "plug and play" application licensing and hosting. Employing a partnership with Mobile operators, ValueFirst acts as a Mobile Virtual Network Operator (MVNO), with a clear focus on SMS mobile messaging. ValueFirst's Mobile Messaging Platform is capable of delivering SMS services to virtually any CDMA/GSM mobile handset across the globe.

Major leading MVNOs have their infrastructure such as MSC, HLR and IN etc and also managing SIM card by maintaining customer related functions like billing, branding etc. Restriction and free to do environment depends on the commercial agreement between MNO and MVNO.

3. SCOPE OF MVNO

There are a variety of MVNOs. Some are simple re-seller of telecom service/mobile network services whereas others have positioned their operations in a manner that customer do not distinguish significantly in service or network performance. The original five models for MVNO were developed in 1999 are shown below.



In the case of most simple MVNO, the companies become more than a re-seller by adding their own brand name and making own marketing strategies. Where as, some leading MVNO deploy their own Mobile Switching Center (MSC) and IN infrastructure to facilitate value added services. In this, MVNO treats radio equipment of MNOs as a commodity while offer its own advanced and differentiated services based on its own IN platform. This allows MVNOs to compete the incumbent operators not only on the basis of price but also through the services being offered.

The scope of MVNO in Pakistan is left open to the terms agreed on a commercial basis between MNOs and MVNOs. The operators (MNOs) can opt for any one model from the given above. Further, the MNO concerned shall submit a copy of the agreement with MVNO and other legal document to PTA for grant of class license to MVNO and after award of license and fulfillment of necessary obligations under the license, MVNO operation shall be commenced.

4. KEY ISSUES

4.1 Number Allocation:

Since the MVNOs operate under certain commercial agreement with MNOs, which also include clauses for exit from such agreements, therefore, the number allocation issue is very important. Similarly, with number portability regime, this issue becomes more important. The numbers blocks for MVNO operation shall therefore be allocated to MNOs and who shall be responsible for its number portability and payment to PTA related issues.

4.2 Branding:

MVNO shall be able to its own brand name. They will also be able to sell SIMs under their brand name on the codes allocated to MNOs for the same purpose.

4.3 Billing:

MVNO shall be responsible for billing its own customer and keeping record of the billing information. The MVNO shall approve billing format from the Authority prior to commencement of service and shall resolve complaints of its customers in this regard.

4.4 Fraud and Security:

Mobile phone theft and Fraud are major concerns and the MNOs have policies and procedures on reporting and deactivating stolen or lost handsets. Since this can be handled at MSC level, MVNO may not be capable for handling this. Therefore, arrangements are made in the commercial contracts between the parties and MNO is obliged to report and deal with any fraudulent use it detects. In the case, MVNO have been allowed to setup its own MSCs then the MVNO shall be responsible for making necessary arrangement to deal with fraud cases.

4.5 National Security

The national security issue will depend on the agreement between MNOs and MVNOs. In case of Full MVNO, the MVNO shall be responsible for taking care of national security issues. In all other cases, MNOs shall be responsible for taking care of national security issues.

4.6 USF and R&D Fund Contribution

MVNO shall contribute in the USF and R&D funds on the same rate being paid by the MNOs.

4.7 Payment of Fees:

The MVNOs shall pay an upfront fee of equal to US\$ 10,000. for the class license. Further the MVNO shall also pay an annual fee @ of 0.5% of its gross revenue minus inter-operator and PTA charges.

4.8 Interconnect and Roaming

The MVNO will not be allowed to make interconnect or roaming agreements with other operators instead will use the parent MNO interconnect and roaming agreements.

4.9 Quality of Service Obligation

The MVNO shall be responsible for maintaining quality of service as per benchmarks set

by the Authority which also applicable for MNOs. The QoS of MVNOs will be checked independently of its parent MNOs and in case the QoS is found below the set level the Authority will reserve the rights to impose penalty on MVNOs.

4.10 Customer Care

The MVNO shall be responsible to establish its own customer care centers to cater for its own subscribers complaints and other related issues.

4.11 Service Interruption/Suspension/Termination

Once MVNO commences its service, then the MNO shall provide service to its MVNO without interruption. Also the MNOs shall not suspend/terminate services to MVNOs under the commercial agreement without prior approval of the Authority.

4.12 Termination of MVNO Class License

In the event if the Authority terminate the license of Parent MNO, the MVNO class license shall stand terminated automatically.

5. COMMENTS AND CONTACT POINT

We would welcome your comments on this consultation paper. Any comments should be forwarded by April 7, 2007 to Director General (Wireless Licensing), Pakistan Telecommunication Authority, Headquarters F-5/1, Islamabad, Pakistan. Comments can be emailed to dgwl@pta.gov.pk or faxed on # 051-2878129.

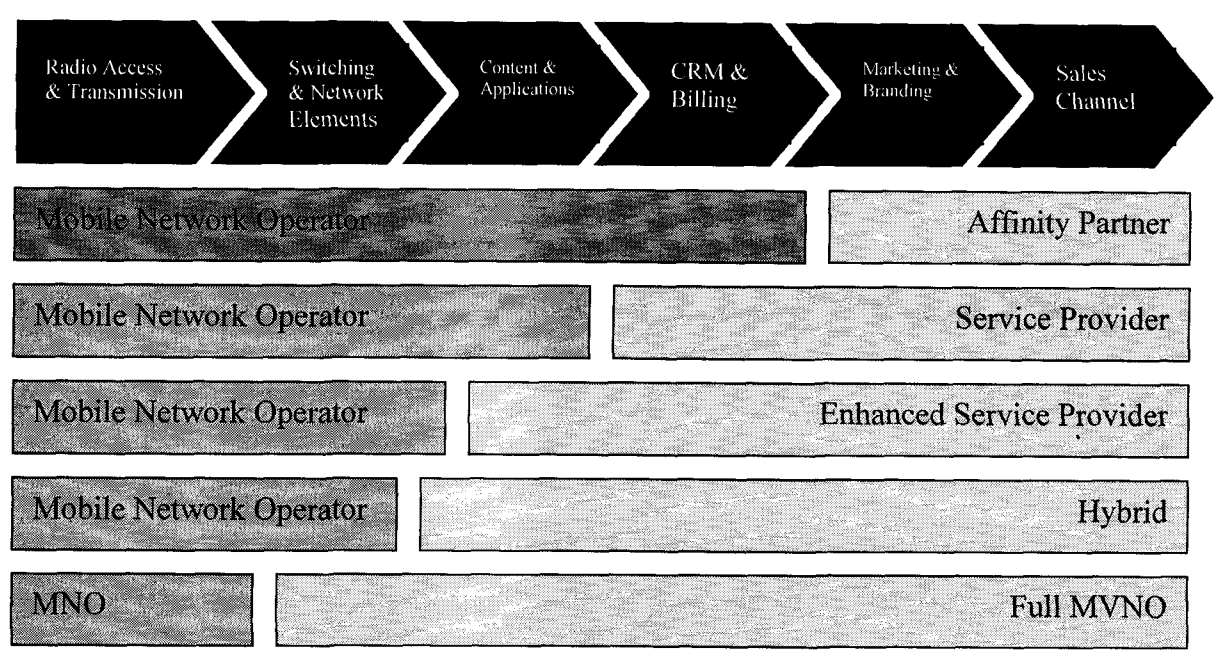
DRAFT Framework for MVNO Services in Pakistan

Mobile Virtual Network Operator (MVNO) is an operator that does not own spectrum instead, MVNOs have commercial arrangements with conventional Mobile Network Operators (MNOs) to buy minutes of use (MoU) for sale to its own customers customers.

2. The Pakistan Telecommunication Authority allows Mobile Virtual Network Operator (MVNO) services in Pakistan in the light of clause 6.12 of Cellular Mobile Policy 2004. Mobile operators are also permitted to support MVNO services. The following terms and conditions shall apply to MVNO service operations in Pakistan:

2.1 Only a company registered with SECP shall be allowed to provide MVNO services in Pakistan.

2.2 The five MVNO models are shown below. The MNOs are allowed to make agreements with interested parties for MVNO operations for any one of the model and which shall be clearly highlighted in the agreement document.



2.3 The MNO that make commercial agreement for MVNO operation in Pakistan shall submit the same to the Authority for approval prior giving effect to this agreement. In addition to the commercial agreement, MVNO shall also submit application to the Authority for the award of MVNO Class License. The application shall include documents given in Appendix-A.

2.4 MVNO shall use its own brand name for the provision of services in Pakistan. For this purpose the Authority shall allocate separate number blocks to MNOs for use by its MVNO only. Further, each MVNO shall have separate number blocks on which it will sell its own SIM. However, for the number portability, MNOs shall be responsible who actually control the network infrastructure. In case an agreement is signed for Full MVNO model then the MNOs shall make sure that their concerned MVNOs make arrangements in MSC etc to enable number portability prior to commencement of services by the MVNO concerned.

2.5 MVNO shall be allowed to install certain network elements as agreed upon by the MNOs and as approved by the Authority. Further the agreement once approved by the Authority shall not be changed by the MNOs and MVNO without prior approval of the Authority.

2.6 QoS shall be the sole responsibility of MVNOs. Since MVNOs shall hold its own Brand name, market its own SIMs and install certain network elements, therefore, the MVNO must make sure that its users receive good quality of service as per benchmarks set by the Authority. In this respect the MVNO while signing agreements with MNO should look into this aspect.

2.7 MNOs shall be responsible for the national security issues. In case the agreement between MNO and MVNO is signed for Full MVNO under which the MVNO will install own MSCs then the MVNO concerned shall make necessary arrangements for the national security matters.

2.8 The MVNO will hold the ownership of its own customers and will be responsible for

making necessary arrangement to facilitate them. The MVNO shall address the complaints of its own users and for this purpose shall establish at least one customer care centre in each city of its operation.

2.9 MVNO shall not be allowed to make roaming agreement with other local / national / International mobile networks. The MVNO shall provide roaming facilities to its customers as per roaming agreements made by its parent MNO.

2.10 MVNO shall be responsible for all payments due to PTA as per its license conditions. MVNO shall also be responsible for the conduct / action of its own subscribers, who shall also abide by the Act, Rules, Regulations promulgated by the Authority from time to time. MVNO shall be responsible for the resolution of billing or other disputes with its own customers as well as MNOs.

2.11 Once an MVNO commences its service, then the MNO shall provide service to MVNO without interruption. Also the MNOs shall not suspend/terminate services to MVNOs under the commercial agreement without prior approval of the Authority.

2.12 The MVNO Class Licence shall be issued for a period of agreement between MNO and MVNO or a valid term of his parent MNO or which ever smaller. If the Authority for any valid reason terminates the license of Parent MNO then this license shall automatically stand terminated.

2.13 This Framework may be reviewed by the Authority, form time to time, if the Authority deems it fit or circumstances so require.



PAKISTAN TELECOMMUNICATION AUTHORITY
HEADQUARTERS F-5/1 ISLAMABAD, PAKISTAN

Licence No. MVNO- 07/WLL&M/PTA/2007

March 2007

**MOBILE VIRTUAL NETWORK OPERATOR CLASS LICENCE ISSUED UNDER
SECTION 21 OF THE PAKISTAN TELECOMMUNICATION (RE-ORGANIZATION)
ACT, 1996**

The Pakistan Telecommunication Authority (“The Authority”) hereby grants a non-exclusive MVNO Class License to **M/s** **(Private) Limited** (“The Licensee”) to provide the MVNO Licensed Services in Pakistan (excluding AJK and Northern Areas) and to establish, maintain and operate the Licensed System through parent MNO, subject to the terms and conditions contained herein.

On behalf of

The Authority
(Private) Limited

On behalf of

M/s Pakistan

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PART 1 GRANT OF LICENCE

1.1 SCOPE OF THE LICENCE

- 1.1.1. This Licence authorizes the Licensee to provide the Licensed MVNO Class Services in Pakistan (excluding AJK and Northern Areas), and to establish, maintain and operate the Licensed System through Parent MNO.
- 1.1.2. The Licensee shall provide the following Mandatory Services through Parent MNO in Pakistan.
Mobile Communication Service, including:
 - 1.1.2.1 emergency services,
 - 1.1.2.2 operator assistance services, and
 - 1.1.2.3 national and international long distance services through Parent MNO ..
 - 1.1.2.4 such other Telecommunications Services as the Authority may, by Regulation, require.
- 1.1.3. The Licensee may provide optional services incidental to cellular mobile telephony through Parent MNO;
- 1.1.4. The Licence does not authorize the following :
 - 1.1.4.1 the provision of Mobile Cellular Telecommunication Services in AJK and Northern Areas
 - 1.1.4.2 the interconnection of the Licensed System to the telecommunication system of a service provider that provides telecommunications services outside Pakistan.,
 - 1.1.4.3 Such other activities or Telecommunication Services as the Authority may by Regulation prohibit.
- 1.1.5. The Licensee shall not provide any Telecommunication Service or install, maintain or operate any Telecommunication System that is not authorized in this Licence, except pursuant to a separate licence or other proper authorization from the Authority.
- 1.1.6. The Licensee shall not authorize or facilitate the Terminal Equipment used by a fixed line customer in connection with the Limited Mobility Communication Service, to be authenticated or used with the Mobile Communication System.