

## **TELECOMMUNICATIONS NUMBERING ADVISORY COMMITTEE**

### **Allocation of Numbers and Codes to Mobile Virtual Network Operators (MVNO) (II)**

#### **Introduction**

At the 41st NAC Meeting held on 14 June 2001, members discussed the allocation of numbers and codes to MVNO. In NAC Paper No. 7/2001, the TA proposed that:

- (a) Mobile network code (MNC) should only be assigned to those MVNOs who operate by themselves a mobile switching centre and its associated facilities; and
- (b) Subscriber number blocks would be assigned to MVNO.

2. On 18 July 2001, the OFTA has issued the Information Memorandum on the Licensing of the Third Generation Mobile Services (the IM). Paragraph 3.3 of the IM stipulates that, subject to meeting certain criteria which would be developed by the TA in consultation with the NAC:

- (a) An MVNO would be allocated its own number sets under the telecommunications numbering plan; and
- (b) An MVNO may be assigned with a MNC.

3. This paper proposes the criteria to be adopted for the allocation of MNC and subscriber number blocks to MVNO, and its applicability to MVNO of the second generation (2G) mobile networks.

#### **Regulatory Support for MVNO on Open Network Access (ONA)**

4. Under the regulatory regime for third generation (3G) mobile services, the 3G mobile network operator (MNO) is obliged to open 30% of its network

capacity to non-affiliated MVNOs. In order for an MVNO to be qualified for the TA's regulatory support on its access into MNO's network, paragraph 2.2.4.1 of the IM states that the MVNO is expected to meet the following minimum requirements on network operation and infrastructure:

- (a) Provide, or intend to provide, mobile services to a customer base, including the general public;
- (b) Provide its own mobile switching and gateway infrastructure, for circuit and/or packet switched traffic;
- (c) Enter into its own interconnection and roaming agreements;
- (d) Provide its own business support systems, such as billing and customer care;
- (e) Maintain its own Home Location Register of subscribers (or equivalent functionality);
- (f) Satisfy requirements for call control, as required by the TA and normally associated with an operator (such as emergency calls, number portability etc.); and
- (g) Issue its own SIM cards.

5. In addition to the above-mentioned infrastructure and operation requirements, the MVNOs are also expected to enter into agreement committing to acquire a minimum amount of network capacity from the MNO over a specified period of time. If an MVNO does not meet the above criteria, the MVNO would need to liaise its access and interconnection issues with the MNO on a commercial basis without the right to seek TA's intervention.

### **Criteria on the allocation of MNC and subscriber number blocks to MVNO**

6. The IM specifies that MVNOs eligible for regulatory support on ONA would be allocated with MNC and subscriber number blocks. In other words, MVNOs satisfying the criteria for regulatory support would automatically be qualified for the allocation of MNC and subscriber number blocks.

7. For those MVNOs who do not qualify for ONA regulatory support, a set of criteria on the allocation of MNC and subscriber number block is needed. As both the MNC and subscriber number blocks are important public resources, they should be allocated to the MVNO prudently. To maintain a level playing

field for MVNOs of similar scale, the TA considers that, in order to be eligible for the allocation of MNC and subscriber number blocks, MVNOs who do not qualify for ONA regulatory support should meet the same requirements in network operation and infrastructure as described in paragraph 4 above. The only difference with MVNOs qualifying for ONA regulatory support is that there would be no requirement on the MVNO's commitment to acquire a certain amount of network capacity from the MNO.

8. In order to ensure that number resources would be utilized in the most effective manner, the MNC and subscriber number blocks would only be allocated to an MVNO upon providing the following evidence to the satisfaction of the TA and, if deemed necessary, a physical audit at the mobile switching centre of the MVNO:

- (a) Copy of purchasing contracts showing details of the network elements, together with the equipment delivery and commissioning schedule, signed by the MVNO and equipment vendor. (Figures on equipment cost could be hidden);
- (b) Copy of interconnection agreements with MNO; and
- (c) Evidence showing roaming arrangement with overseas network operators is in place.

Once the MNC and subscriber number block are allocated, the TA proposed that they should be implemented in 12 months.

9. Since MVNO qualified for ONA regulatory support would be entitled to allocation of MNC and subscriber number blocks, the documents described in paragraph 8, together with other documents necessary for the application of ONA regulatory support, would need to be submitted when applying for ONA regulatory support from the TA.

### **MVNO of the 2G Mobile Networks**

10. Similarly, in the 2G environment, a service provider may operate a certain amount of network infrastructure such as a mobile switch. The service provider will become a MVNO and a telecommunication licence is needed.

11. Regarding the criteria to be adopted for the allocation of MNC and subscriber number blocks to 2G MVNO and the control over the allocation of numbers and codes, the TA considers appropriate that the same set of criteria described in paragraph 4 and 8 should apply. As the ONA policy would not be applied to the 2G mobile services, 2G MVNO would not be eligible for regulatory support on ONA.

**Advice Sought**

12. Members are invited to give their views and comments on this paper.

Office of the Telecommunications Authority  
6 September 2001