



**“Open Network” Regulatory Framework for  
3<sup>rd</sup> Generation Public Mobile Radio Services  
in Hong Kong**

**Industry Workshop**

**New World Mobility Presentation  
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# Workshop Main Objectives



- Define MVNO
- Elaborate on minimum MVNO Commitments
- Define “Network Capacity” and find an agreeable measurement methodology

# Definition of MVNO



- Definition of **MVNO** should be **aligned** with stated regulatory **policy objectives**:
  - “...to meet the Government’s policy objective of introducing more competition at the content and service application level...”
  - “...allow room for all incumbent 2G operators to take part in the 3G business even if they lose out in the licence bidding process for 3G network operation”
- The “Full MVNO” (and in some instances, the ESP) fulfills the policy objectives but not the Service Provider
- Accepting too broad a definition of MVNO will create a significant nuisance to the MNO
- The MNO’s obligation should be limited to “sharing” the scarce resource (i.e. the radio spectrum) and use of the portion of the core network as is absolutely required to deliver/receive the call to/from MVNOs and not sharing proprietary applications or market available applications
- The TA has not secured access to network capacity to resellers under the current 2G environment, why would it provide for a different regime under the 3G environment

# Minimum Commitments of MVNO



- The mandated offer of capacity by the MNO should not translate into an enhanced risk for the MNO
- The MVNO should be mandated to commit for such period of time necessary for the MNO to **totally** recoup the cost incurred for provided the extra capacity to the MVNO
- The MVNO should pay up front the capital expenditure necessary to generate the extra capacity or provide sound financial guarantees to ensure the MNO is not expose

# Guidelines for Definition of Network Capacity



- The “short-term busy hour traffic capacity” is highly dependent on the services mix, the resulting traffic profile in terms of data rates, symmetry and the location
- Any method to assess the “short term busy hour traffic capacity” **MUST** be based upon the assumptions made by the MNO with regards to the services mix, the resulting traffic profile and the GOS
- The MVNO will have to adopt the MNO traffic assumptions when defining his services as this forms the basis of dimensioning the network to provide a defined level of service quality

# Measurement Methodology



- Unlike FDMA and TDMA systems where the capacity is bandwidth limited, the capacity of CDMA systems is interference limited. In order to identify the primary source of interference by user, the adopted measurement method must take into account the air interface load generated by users of the different services and the resulting level of interference
- The measurement area should reflect the different morphological areas in the Hong Kong SAR as service usage is usually different in the different morphological areas
- Since the “busy hour” of the MVNO traffic will be unknown in the initial stage (and is likely to differ from one MVNO to the other), it is difficult from a regulatory perspective to determine objectively the measurement time
- NWM expresses its reservations on the measurement method and the scope of measurement area and time. NWM feels that these items are not sufficiently well understood or defined in an unambiguous manner. Furthermore, NWM would like to have further discussions with vendors of network management systems to establish the level of functionality and performance of 3G NMS