





## II. MVNO

### 1. MVNO

OFTA(2001) MVNO MVNO  
 . MVNO [5] MVNO “  
 PMRS(Public Mobile Radio telephone Services) , PCS(Public Communications Services) , MC(Mobile Carrier) 가 MNO  
 ”  
 가

MVNO SP  
 MSC, HLR Full MVNO  
 , OFTA Full MVNO , MVNO , MNO  
 < 2>

< 2> MNO MVNO [6]

		MNO	Full MVNO	Reseller
Interface	Billing CRM			
Service Engine	MSC HLR			
Air - interface	BSC BTS Antenna		MNO	
Backbone	Transmission circuits	FTNS	FTNS MNO	

MSC: Mobile Switching Center  
 BTS: Base Transceiver Station

BSC: Base Station Controller  
 MNO: Mobile Network Operator

HLR: Home Location Register  
 FTNS: Fixed Telecommunications Network Services

MVNO

[7]. MVNO 가

. MVNO

가

< 3>

		II(LLU),	
		( , ) , ( , )	
	3G ONA	3G 30%	, OFTA
		OFTA	
		, OFTA	

MVNO 가 (Local Loop Unbundling) MVNO 가 MVNO 가 , MVNO MVNO PNETS [8], MVNO [9], [10], 3G ONA[11]

## 2. 3G MVNO

3G MVNO , , 3G MVNO . 3G MVNO . 3G MVNO 3G MNO . 3G MNO 3G MVNO 가 가 , [13]. 3G MVNO [14].

< 4> 3G MVNO

- 3G	- 3G MNO
-	-
-	-
-	- 3G MNO

3G MVNO [15].

- 3G

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- ISP(Internet Service Provider), ASP(Application Service Provider)

- ( , , , )

III. 3G MVNO

1. 3G ONA 3G MNO

3G MVNO 3G 3G ONA

MVNO 3 3G

MVNO 3G ONA( ; Open Network Access)

, MVNO MNO NSPs(Non-affiliated Service Providers) 3G

MNO 30% . MVNO

MNO MNO

NSPs MNO , CP

, MNO NSPs OFTA

, MNO OFTA

가 30% NSPs 가

MNO 가 가 30%

, MNO MNO CP, SP , MNO MVNO

가 , OFTA . MNO

.....

CP, SP 가 , MNO  
MNO 가 NSPs .  
3G 3G MNO Hutchison 3G HK, SmarTone 3G, Sunday 3G, Hong  
Kong CSL , 3G ,  
, [16].  
, 36 , 3G , 3G 6 ( )  
) MVNO, CP, SP .  
, 3G MNO 가  
MVNO, CP, SP ,  
가 MNO 30%가 .  
, CP, SP ,  
MVNO ,  
36 . MNO  
, MNO  
MVNO, CP, SP .  
, MNO MVNO, CP, SP  
. 가 .

## 2. 3G MVNO

3G MVNO PNETS(Public Non-Exclusive Telecommuni-  
cations Network Services) 가 . 3G MVNO  
, HK\$750 , HK\$750 [17].  
3G MVNO Numbering Plan MVNO , MNC(Mobile  
Network Code) , 3G OFTA (intervention)  
. 3G MVNO ,  
, OFTA .  
3G MVNO , Trident Telecom Ventures 2001 2/2.5G  
MVNO 가 3G 2002 1 , 가

< 5> 3G MVNO

905	Trident Telecom Ventures Limited	2001.11.29
908	China Motion Telecom(HK) Limited	2001.12.03
922	China Unicom International Limited	2001.12.29
935	Shell & SUNDAY Mobile Communications Limited	2002.02.26
946	i100 Wireless(Hong Kong) Limited	2002.04.12
951	China - Hongkong Telecom Limited	2002.04.29

2 . China Motion Telecom 2001 11 MVNO  
 , Ericsson . China Unicom  
 MVNO

3G MVNO . MVNO

ITU

PNETS

가  
 OFTA MVNO가 MNO '17X'

MNO

2

, 2G MNO 3-digit '17X' , '172'

'174'

. 3G

가 , 4-digit '17XX'

'172X' '174X,' 5-digit

'172XX' '174XX'

5-digit '17XXX'가

[18],[19].

3. 3G MNO 3G MVNO

3G MVNO 2G 3G 가 , 2G  
 MVNO MNO . 3G  
 (capacity) 30% MVNO  
 3G MNO ,  
 3G OFTA 가 .  
 3G MVNO (radio spectrum) 가 Switching, Billing, IN  
 system . 3G MVNO MNO (Base  
 Station, Base Station Controller ) ,  
 MNO .  
 (Long Run  
 Average Incremental Costs: LRAIC) , LRAIC 가  
 . LRAIC ,  
 가 , Cost-plus  
 , MVNO  
 [20].  
 CP, SP 가 가 , 가  
 . CP, SP MNO 가  
 CP, SP MNO . CP, SP  
 , MNO CP, SP  
 . MNO CP, SP  
 MNO . OFTA MNO  
 CP, SP 가(Fully Distributed Cost)

< 6 >

	가
MVNO	(Long Run Average Incremental Costs) ( 3 20%)
CP, SP	가(Fully Distributed Cost) , 가 MNO

< 7> 3G MNO 3G MVNO

3G MNO	3G MVNO
- NSPs(MVNO, CP, SP) 30% - NSPs - MVNO - CP, SP OFTA	- PNETS - MNO - OFTA - -

가  
 , MNO  
 , 3G ONA, 3G MNO 3G MVNO 3G MNO 3G  
 MVNO < 7>

V.

3G MVNO  
 3G  
 가 3G MVNO  
 3G ONA, 3G MNO , 3G MVNO  
 3G , 3G MVNO 3G MNO ,  
 , 3G ONA 3G MNO MVNO  
 30% , 3G MNO  
 , 3G MVNO  
 , 3G MVNO PNETS  
 6 가 3G Numbering  
 Plan 3G MVNO MVNO MNC , 3G  
 OFTA (intervention) . 3G MVNO  
 OFTA  
 3G MVNO MVNO 3G  
 . 3G  
 2G 3G 3G MNO 3G MVNO  
 win-win . 3G



Hutchison 3G HK Limited.”

[17] OFTA(2001), “Telecommunications Ordinance; Public-Exclusive Telecommunications Service Licence(Mobile Network Operator Services).”

[18] OFTA(2001), “Allocation of Numbers and Code to Mobile Virtual Network Operators.”

[19] OFTA(2002), “Allocation of "17X" Short Codes to Mobile Network Operators and Mobile Virtual Network Operators.”

[20] OFTA(2001), “Open Network Access' for Third Generation(3G) Mobile Services.”