Chapter 6.20
3G Mobile Virtual Network Operators (MVNOs):
Business Strategies, Regulation, and Policy Issues

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ABSTRACT

Digital convergence brings new players in the telecom market and the Mobile Virtual Network Operators (MVNO) are an alternative way for companies to enter the 3G telecom market and start offering services. This chapter aims to contribute to the assessment of the market conditions, architectures and potential for profitable business cases of MVNOs aiming to operate in the mature and competitive markets. The results and conclusions provide guidelines for the wide

audience of mobile market players and media companies, spanning telecom operators to regulators and academia. In the following, the necessary background information is presented, quantitative figures such as Net Present Value, pay-back period, investment cost, revenues and running cost for different MVNO business cases are estimated and compared. The MVNO's impacts on a MNO operator and the effects of MVNO collaboration with a WLAN operator are analyzed with the same method and figures.

INTRODUCTION

The traditional barriers between separate sectors (so far) like telecom and broadcast companies, as well as fixed and mobile operators, are no longer so distinct.

Digital convergence will appear at different levels, such as user terminal, backbone network technology, tariffs and even at business or commercial levels. It seems that in few years the separation between mobile and fixed markets and between telecom and broadcast companies will disappear, allowing many agents to compete in a single telecom market.

As the licensing phase of 3G networks reaches a more mature level and the telecommunications operators are investigating the business perspectives of 4G networks, there is an increased interest worldwide from enterprises, active or not in the telecommunications sector without a 3G license, to become part of the 3G value chain, as it is considered a business opportunity with exceptional or acceptable profit margins. However, the economic and technical requirements imposed upon 3G licensees act as an economic burden to 3G developments and therefore the questions of better and more rapid market exploitation of licenses have already arisen and business collaborations are sought after. This situation encourages solutions without a radio access network via the network

operations or service provision market channel. Especially for those without a 3G license, a new channel of entering and participating into the mobile business is the Mobile Virtual Network Operator (MVNO) channel. MVNOs initially appeared in the 2G market reflecting the self-evident interest of companies to enter the telecom market and start offering services.

Companies from different sectors, working or not in the mobile sector, as a first step to enter the market and start offering services can use the channel of MVNO, which is complementary either to service provision channel or to operator channel.

According to their origination, companies can be classified into three categories (Lillehagen, et al., 2001). First, those who already have business in the communication sector, second, those with business outside the communication sector and last, companies with business inside the Information and Communication Technology (ICT) sector but not as telecommunication operators (media and broadcast companies).

The interest from the companies that are already activated in the telecom sector is originated from their need to enter new markets and to increase their total market share. Operators with only fixed networks want to expand into the mobile sector because they experienced a substitution from fixed to mobile telephony and a reduction of their traffic while the total mobile traffic increased. Mobile operators already want to expand in order to increase their geographical coverage (domestic or international) in areas where they don't own a license. In this case main business sectors such as marketing, billing and customer care are shared by both networks in order to reduce the operational cost of the overall network. Furthermore, some network elements that the company already owns reduce the cost of the initial investment.

Companies inside the ICT but not in the communications sector, e.g., Internet Service Provid-

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