

STRATEGIES OF MOBILE VIRTUAL NETWORK OPERATORS IN THE SOUTHEAST EUROPE REGION

Anto Domazet¹, Nadžida Sarić²

¹Faculty of Economics, University of Sarajevo, Bosnia and Herzegovina,
anto.domazet@efsa.unsa.ba

²Head of Interconnection and Market Regulation Division, Communications Regulatory
Agency of BiH, Bosnia and Herzegovina, nsaric@rak.ba

Abstract

MVNOs (Mobile Virtual Network Operators) are companies that function as mobile operators but do not have their own frequency spectrum allocation or the necessary network infrastructure. Those companies make business arrangements with one or more licensed Mobile Network Operators (MNOs) by leasing from them the access to mobile network and capacities. Such business concept enables the MVNOs to participate in the mobile communications market, thus extending the value chain and providing innovative mobile communication services specifically adapted to target segments. MVNOs have significant share on the mobile market in Europe and make influence on customers of mobile services in the meaning of change a telecom company and develop the new competitive strategies.

The aim of this paper is to evaluate and predict the growth strategies of the MVNOs into the South-eastern Europe markets (SEE). Findings of comparative analysis have based on the research of secondary sources, practice of EU countries with licensed MNOs and MVNOs and on our expert opinion.

Findings indicate that MVNOs which are financially strong have used *service development strategy* on the present market, while companies which operate in mobile telephony as a core business have chosen *market development strategy*. *Strategy of diversification* is the most applicable for companies which have a background and its core business within fixed and Internet and have added mobile telephony services to its portfolio. *Strategy of expansion* on the present market in combined with present services is not frequent on MVNO market.

As an alternative growth strategy, MVNOs in SEE countries will apply a diversification strategy that implies parallel development of new services and new markets with the aim of expansion. The major motive for applying the diversification strategy can be a relatively small existing customer base and a new market entry.

Appearance of MVNOs on the SEE market will be in form of partnership strategy with existing MNO as a form of international contracting cooperation. Pan-European global MVNO will change the industry of mobile market which will be driven by market forces, technological evolution and it will present an example of creative process destruction.

JEL classification: L22, L96

Keywords: MVNO, growth strategies, entry strategies, foreign market, mobile communications

1. Introduction

Mobile Virtual Network Operators – MVNOs are companies that function as mobile operators but do not have their own frequency spectrum allocation and all of the required network infrastructure. MVNOs therefore make business arrangements with one or more licenced Mobile Network Operators (MNOs) from which they lease the access to mobile network and capacities. Such business concept enables the MVNOs to participate in the mobile communications market, thus extending the value chain and providing innovative mobile communication services specifically adapted to target segments.

MVNOs are taking significant market share (which varies between 5% and 25% depending on the respective market), influencing switching behaviour of mobile users, as well as developing new competitive strategies. Having in mind their focus on offering differentiated services at lower prices, MVNOs are increasing both price competitiveness and Average Revenue per User (ARPU) in the mobile communications industry, an indicator that has shown a tendency to decrease over the past several years.

This paper aims at evaluating and indicating growth strategies and applicative strategies for the entry of potential MVNOs from the Southeast Europe (SEE) market into foreign markets. The results of the comparative analysis are based on secondary data research, the research of practice applied in EU countries where services are being provided by both traditional and virtual mobile operators, as well as on our expert analysis.

2. MVNO expansion strategies

Expansion strategies of individual MVNO groups shall be analysed through Ansoff's product/market expansion matrix, which provides a useful tool for detecting new intensive growth opportunities (Figure 1). MVNO management first considers whether it could gain more market share with their services in their current markets (market-penetration strategy). Next it estimates whether new markets could be found for its services (market-development strategy). Then it considers whether to introduce new services that potentially could be of interest to their current markets (service-development strategy). The last phase of these activities is to consider developing new services for new markets (diversification strategy).

Figure 1. Ansoff's service/market growth matrix for MVNOs

		SERVICE	
		Current	New
MARKET	Current	(1) Market penetration strategy Yesss! Telekomunikation	(3) Service-development strategy Song, Energis, NTL, Tele2, Kingston Communications, Tesco, Sainsbury's, Virgin Mobile
	New	(2) Market-development strategy Sense Communication, Carphone Warehouse, One.Tel, Mobison	(4) Diversification strategy Glocalnet, Dial n'Smile

Source: Ansoff, 1965, p. 241

Secondary data research shows that launching a new service into an existing market (Strategy No. 3) is the strategy commonly used by MVNOs on the mobile communications market. This group of MVNOs generally includes financially strong companies that have one thing in common: they all operate successfully in their target markets, but run a different range of core products/services. We can take the example of MVNOs whose core business includes fixed telephony and Internet (e.g. Tele2, Song, Kingston Communications, NTL). These companies maintain a database of fixed telephone users to which they additionally offer their mobile services. Besides, the competitive advantage of fixed operators in the MVNO business is drawn upon the existing technical platform as well as the supply of new services. Since they enter the mobile telephony industry as „full MVNOs“, these telecom companies create new business opportunities by integrating mobile and fixed telephony services. Aside from the MVNOs, which operate in the telecommunications sector, this strategy is pursued by companies from other sectors as well, such as trading companies (e.g. Tesco and Sainsbury's) or energy companies (e.g. British Gas Communication and HamEl). Their competitive advantage lies in the existing database of users and extensive distribution channels. One of the main motives for a company to enter the mobile communications market as an MVNO is the increased customer loyalty and a strengthened position of its core business in the existing market. Their large sales centres provide for distribution channels to the existing customer base, which is being carefully evaluated.

Those MVNOs that opt for the market-development strategy seek to expand their business within the supply of the existing services in domestic, but also in foreign markets (Strategy No. 2). Such companies usually come from the telecommunications sector, meaning that mobile telephony is their core business. The case of Carphone Warehouse is particularly interesting since this MVNO first started operating in the UK mobile communications market as a

service reseller (thin MVNO). After implementing a brand strategy, as a “new” MVNO it both retained its old users and attracted new groups of users. This particular operator has focused on new users within the same geographic area. The guiding idea of this group of MVNOs is to develop new markets for the services that have been founded on the previous market experience. The second motive for an MVNO to choose this strategy could be the opportunity to exploit technical infrastructure that has not been established in the existing market and would enable it to achieve economies of scale (e.g. Sense Communication presence in Scandinavia).

Diversification strategy implies a parallel development of new services and new markets with the aim of MVNO expansion (Strategy No. 4). This group of MVNOs includes companies having fixed telephony and Internet as their core business and seeking to expand their portfolio to include mobile communication services and to enter new markets. Their target segments include not only different groups of residential users but also large business users. Companies Glocalnet and Dial n'Smile, for example, began their operations in fixed telephony in 1998, and by 2000 they had already launched mobile services as well (Kristensson, Gahnström, 2001). Unlike companies that draw on the new service strategy, these telecom companies do not have a fixed backbone of their own but rather function as virtual operators in fixed telephony (so-called alternative operators). The main motivation of these MVNOs to use the diversification strategy is a relatively small existing user database. They are looking to attract new users by adding mobile communication services to their offer, which makes it more appealing and conducive to company's growth. The diversification strategy might be beneficial to this particular type of companies since telecoms already operate in fixed telephony, which brings about benefits to their MVNO operations. This is both a vertical backward integration in the sense of having access to certain technical components, billing services and other support systems, and a forward integration involving distribution, marketing and end user care. There is one significant difference between fixed telephony companies from this group that are entering the MVNO business and those companies whose core business does not involve telecommunications: unlike the latter, the former group has a small customer database.

Strategy of market penetration into the current market with the existing services is less frequent in the case of MVNOs (Strategy No. 1). By adopting this strategy, MVNOs seek to gain more market share with their services in their current markets. There are three ways in which an MVNO can pursue this strategy: a) increase demand by existing users, b) encourage competitor customers to switch to their services and c) target its marketing activities at potential underdeveloped segments (Kotler, 1999). The example of an MVNO that uses this strategy is Yesss! Telekomunikation, which aims at taking over its competitors' customers by offering them low rates to any destination in the domestic market (Austria). In the case of domestic market growth, an MVNO

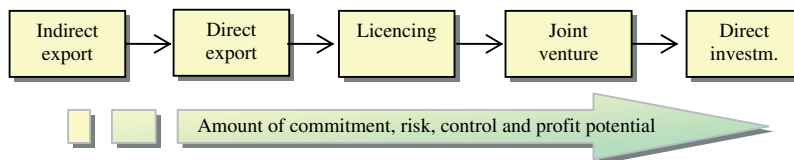
could create objective conditions for the expansion of its existing mobile communication services as well as for the development of new services.

Since it is closely connected with all elements of market development, there are three possible scenarios for the internationalization of MVNOs: a) entry of another MVNO from abroad will trigger domestic market growth, b) foreign MVNO operations in the domestic market will induce changes in market structure, and c) entry from domestic market into that of another country/other countries will bring about MVNO's geographic expansion.

3. MVNO foreign market entry strategies

One of the most important international marketing strategy decisions that a company aiming to internationalise its business needs to take is to choose the optimal strategy for foreign market entry. This choice will directly affect the company's performance in the foreign market since each strategy implies different amounts of commitment, risk and control. Figure 2 illustrates five foreign market entry modes: indirect and direct exporting, licencing, joint ventures and direct investments.

Figure 2. Five modes of foreign market entry



Source: Kotler, Keller, 2006, p. 674

There are three alternative international market entry strategies: a) entry through exports of goods and services, b) entry through international contractual cooperation (transfer of production abroad without the investment of capital), and c) entry through investment (transfer of production abroad with the investment of capital). Companies can opt for several different strategies depending on a market or even apply a strategy mix to enter their target market.

3.1. Entry through exporting

The concept of export marketing draws on domestic environment practices in terms of resources and the capacity for international market entry. A company focuses on those markets that do not diverge much from the domestic marketing environment (most frequently neighbouring markets) and apply a marketing mix that has already been tested in the domestic market. This means that an

ethnocentric orientation and domestic managerial preferences are the prevailing factors in companies that practise export marketing (Domazet, 2001). Exporting is defined as international sale of goods that are produced in one country and disseminated across its borders by applying appropriate legal and trading procedures (Jović, 1997). This mode of foreign market entry is not applicable to MVNOs having in mind the nature and the form of their market activities.

3.2. Entry through international contractual cooperation

Companies aiming to enter foreign markets via international contractual cooperation have several options at their disposal, such as: cross-border transfer of production licence, grant of franchise rights, long-term collaborative manufacturing with an international partner, management contracting, assembly operations, contract manufacturing, production sharing and strategic partnership.

Despite occasional drawbacks in relation to profit and risk, the management should be aware that export activities only gradually develop through the internationalisation stage, as well as that there are three dimensions to a satisfactory export performance: increased sales and market share growth, higher profitability and improved competitive position (Czinkota, Ronkainen, 1998). As far as MVNO practice is concerned, two modes of foreign market entry via international contractual cooperation can be applied: franchise system and strategic partnership.

3.2.1. Franchise system

Franchising refers to a specific form of practicing contractual marketing. It is carried out through different modes of cooperation and business relations between partners as independent subjects that are bound by a franchise agreement. By means of this agreement, one of the partners (the franchisor) grants the other business partner (the franchisee) rights, whether in terms reserved or not, under certain conditions, so as to establish a unique business organisation with individualised marketing elements (brand, product image) (Jović, 1997). The system consists of one franchisor and several franchisees from different countries, mutually bound by the agreement.

Applied to the mobile communications market, a licenced MNO typically grants the franchise to those MVNOs that are more „virtual“, i.e. do not have a technical platform of their own and lack the ability to provide differentiated services (due to limited financial and other capacities). Only those licenced MVNOs that maintain separate retail and wholesale business operations can pursue a successful business strategy with an MVNO. Certain MNOs apply the strategy of entering a specific market as telecom operators whose core business

concentrates on wholesale activities, after which they conclude separate agreements with different MVNOs for each target segment individually. Such strategy has granted success to operator Telfort and its partner KPN who entered into business arrangements with 19 MVNOs (Lennighan, 2006). Some MNOs franchise the distribution segment by launching their own MVNO, usually under a sub-brand, with the aim of improving services for the users of target segments. The examples of these companies can be found in Austria, where the MNO One Austria has its own MVNO: Yesss Telekommunikations, in Denmark (TDC Mobil launched Telmore) and Germany (E-plus launched Simyo).

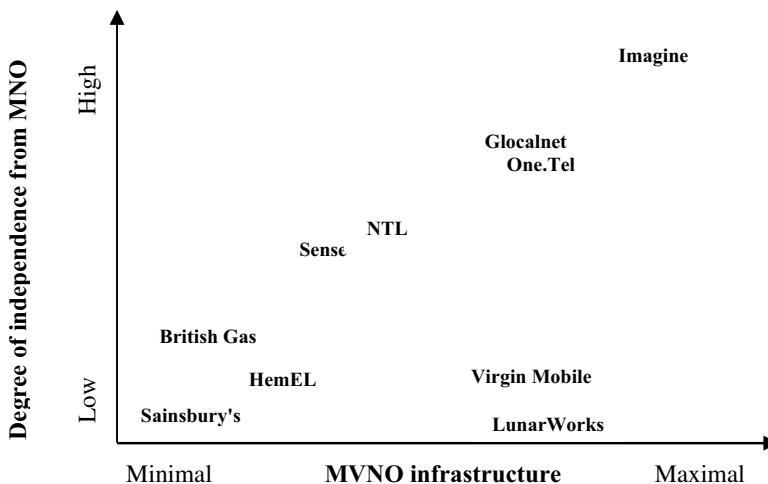
The structure of MVNOs in individual SEE market segments could be established as: a) diversification of an MNO, b) original market initiative and c) direct entry of a foreign MVNO. We believe that options under a) and b) are currently not possible in the SEE due to two reasons: (1) many MNOs are still mixed telecom operators (fixed-mobile), meaning that before considering further diversification, it is first necessary that they divide into separate entities and establish the wholesale operation segment; (2) there is no original initiative among the existing MNOs because of the fact that the market has still not reached the saturation phase and the demand for services is high. One possible option would be a direct entry of a foreign MVNO into individual SEE market segments. The MVNO entry is anticipated through partnership strategy as a form of international contractual cooperation with an existing MNO.

3.2.2. Strategic partnership

In EU countries, one way to enter a foreign market would be to make a business and technical cooperation agreement between an MVNO and an MNO. On the one hand, licenced MNOs seek to sustain the growth of their mobile networks by gaining more market share, most commonly by applying the diversification strategy. Since they are faced with higher customer acquisition costs and higher churn rates, the partnership with an MVNO is expected to bring about certain benefits such as lower customer acquisition costs, long-term customer retention and delivery of specialised value-added services. On the other hand, MVNOs aim to find a partner who would grant them access to its mobile network at reasonable rates. MVNOs with insufficient technical platforms greatly depend on their partner MNOs (British Gas Comm. with Vodafone). In case an MVNO decides to increase investment in infrastructure, it would automatically achieve a higher degree of independence and differentiation of services in relation to a partner MNO (Figure 3). One of foreign market entry modes for a licenced MNO is to found its own MVNO and use defined strategies to enter the market in one or more countries.

We will take the example of Dutch incumbent operator KPN, which has chosen to enter mobile communications markets in Spain and Portugal with the strategy of offering low rates to both residential and non-residential users. Immediately after entering the Spanish market, KPN took over the majority of users from E-plus, a virtual operator that, besides Germany, operates in several other European countries using the same low-rate strategy (Global Mobile, 2006). We believe that MVNO entry into the SEE market segments (Croatia, Bulgaria, Romania) will be based on the strategy of strategic partnership with a licenced MNO because a) these segments have created more favourable conditions (favourable external opportunities and vast internal strengths), b) a high degree of market penetration has been achieved, and c) there are three MNOs operating in each market whose offer includes 2G and 3G technologies.

Figure 3. Partnership relations between MVNO and MNO
-degree of independence vs. infrastructure-



Source: Created by authors

In the case of some of these markets (Bulgaria and Romania), there is a lack of regulatory framework for further liberalisation of mobile communications market, which may pose a barrier to entry.

3.3. Entry through investment

Another mode of foreign market entry is the transfer of production across borders made through the investment of capital. Capital is released into a

foreign market in order to establish production in a country with optimal conditions for profitable business operations. Foreign investments are the most complex of all foreign market entry strategies. Unlike portfolio investments, direct investments intend to create lasting and active economic interest that reflects investors' goal to generate returns on invested capital. The main feature of direct investment is that a foreign investor gains ownership rights, voice in management and the right to exercise control over business operations. Regardless of whether operators entering the mobile communications industry are coming from the telecom sector or not, their reasons for choosing to enter as MVNOs as well as their (domestic and/or foreign) market entry strategies largely differ (Table 1). For example, Tele2 offer is based not only on low rates, but it also provides convergent services of mobile and fixed telephony and Internet and is looking to increase domestic market share and establish competitive advantage in foreign markets (Eslava, 2005).

Foreign investment can be realized in two ways: by establishing a new company and by acquisition of an existing company operating in the local environment. Interested telecom companies can avail themselves of the opportunity to make acquisitions through the process of privatization of telecommunications, which is still underway in SEE countries. A joint venture is another common mode of foreign market entry for MVNOs. Examples include Easy Mobile (TDC and Easy Group), Virgin Mobile (T-Mobile UK and Virgin Group; Virgin Mobile and Optus in Australia), Lunarworks and Europolitan in Sweden. An MVNO often lacks full independence since the partnership assumes that it becomes a part of the MNO. The role of an MVNO in such partnership can be seen as threefold: that of a shareholder, service provider and competitor. Motivations for MVNO joint venture formation, aside from foreign market entry, are diverse and include: a) reducing investments and investment risks in building the UMTS network (Telia and Tele2), b) meeting regulatory requirements (Europolitan and Sense), c) increased GSM network traffic and expansion of customer database by virtual operator's existing database (Europolitan and HemEL), d) benefits of a strong brand (e.g. Europolitan is owned by Vodafone) (Blom, Ernstsson, 2001).

Table 1. Reasons for operating as MVNOs – examples from Europe

MVNO / Country		Supply of services: low rates	Increase domestic market power	Supply of services: differentiation	Increase customer loyalty	Supply of convergent services	Niche development
MVNO from telecom sector							
Yesss! Telekom.	Austria	✓	✓				
Simyo	Germany	✓	✓				
Tele2	Various countries	✓	✓			✓	
Energis	UK		✓			✓	
One.Tel	UK	✓	✓			✓	
MVNO from non-telecom sector							
Mobyson	Scandinavia			✓			✓
Lunar Mobil	Sweden			✓	✓		✓
Easy Mobile	UK	✓		✓			
Sainsbury and Tesco	UK	✓		✓	✓		
Virgin Mobile	UK	✓		✓			

Source: Eslava, 2005, p. 2

We believe that the SEE market has still not reached the degree of development and liberalization needed in order for this business arrangement to prevail. Besides via foreign direct investment, telecom companies can enter the SEE market by way of international strategic alliances.

3.4. Role of strategic alliances in telecommunications

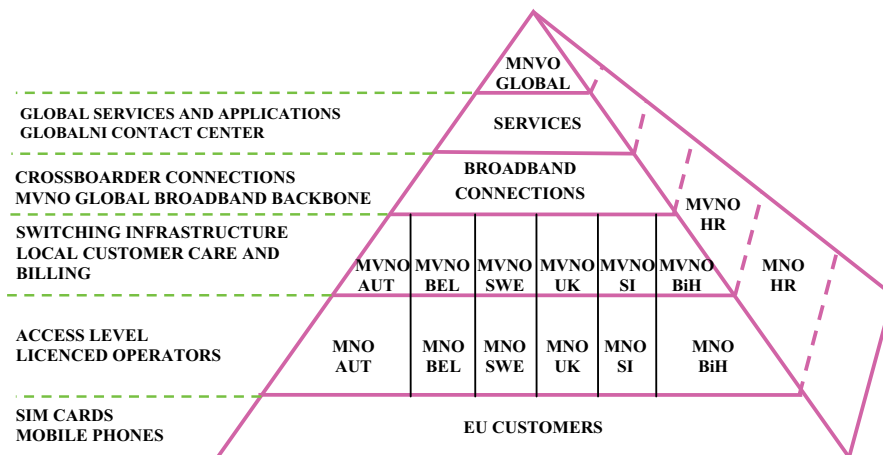
A strategic alliance is clearly defined by three major characteristics: a) it is a union of two or more companies that pursue a set of agreed upon goals while retaining their independent status; b) partner companies share the effects of cooperation and exercise joint control over the alliance in terms of goals they have agreed upon; c) companies forming an alliance contribute to common results through continued cooperation in key strategic areas (technology, products etc.) (Yoshino, Rangan, 1995). Guided by the telecom reform process, mobile communication operators are entering into various forms of alliances and partnerships, which provides them with necessary reinforcement to compete in both national and international markets. In fact, the number of strategic alliances in the telecommunications industry is on the rise. When speaking of MVNOs, it is important to mention the alliance called MVNO Global Initiative, which was founded in Luxembourg in late 2005 by leading

experts from telecommunications and finance industry. Its mission is to develop a Pan-European global mobile operator using full infrastructure MVNO concept. This includes introducing and completing the horizontal integration of existing MVNOs, as well as creating conditions to expand globally. The main objective is to create a global telecommunications company based on innovative services and superb customer care with the aim of reaching economies of scale, reducing duplicate departments or operations, lowering costs and increasing profit. The company could in addition benefit from the synergy such as a better use of complementary resources, centralized service platform and the value of a global brand name.

Experts from European consulting firms believe that the developed EU mobile communications market is currently in transition and that the new-generation MVNO era is coming to completely change the mobile communication industry. This process is unavoidable and driven by economic forces and technology evolution, setting an example of a creative destruction process. Unlike Denmark and Finland, where there is a large number of MVNOs due to market liberalization, in the CEE countries, under the pressure of regulatory authorities, the process of MVNO development is just starting.

MVNO Global is designed as a network platform that consists from devices and equipment in each country, connected to each other by broadband connections. Each country's Gateway Mobile Service Switching Centres (GMSC) will be connected to other incumbent operators under the terms of interconnection agreements (Figure 4). Service platform and applications should be centralized as much it is technically possible in order to reduce capital expenses.

Figure 4. MVNO Global operating scheme



Source: MVNO Global Initiative: www.mvno.biz (19.12.2007)

In each country, Global MVNO should have its own Mobile Network Code (MNC) and International Mobile Subscriber Identity (IMSI). In the first stage of the project, the analysis of mobile markets in EU countries will be performed in order to identify key players and select those companies who are interested in approaching the integration process. The second stage applies to the development of a common standardised service platform by upgrading the existing networks. Finally, in the third stage, platform access and connection will be enabled for other interested countries as well. SEE countries planned in this process are: Slovenia (in the second stage), Albania, Bosnia and Herzegovina, Bulgaria, Serbia and Montenegro (third stage). MVNO Global also plans to launch a start up phase aided by its own financial resources, strong brand name and know-how in telecommunications and international marketing.

3.5. Conclusion

The conducted research shows that financially strong MVNOs often use the strategy of launching a new service into an existing market, whereas the companies whose core business is mobile telephony opt for the market-development strategy. Diversification strategy is most common among the companies having fixed telephony and Internet as their core business and seeking to expand their portfolio to include mobile communication services and to enter new markets. The strategy of market penetration into the current market with the existing services is the least frequently used by MVNOs. The MVNO entry into the SEE market is anticipated through partnership strategy as a form of international contractual cooperation with an existing MNO. Besides, the developed EU mobile communications market is currently in transition and a new-generation MVNO era will completely change the mobile communication industry by launching a Pan-European global mobile operator. This is an unavoidable process, driven by economic forces, technological evolution, and sets an example of a creative destruction process.

REFERENCES

1. Ansoff, I. H. (1965). *Corporate Strategy-Business Policy for Growth and Expansion*, McGraw-Hill Book Company
2. Blom, M., Ernstsson, M. (2001). *The Mobile Telecom Industry - an Industry in Change*, a Master Thesis at Stockholm School of Economics, Institution of International Business, Stockholm, p. 38-39
3. Czinkota, M., R., Ronkainen I., A. (1998). *International Marketing*, Fifth Edition, the Druden Press, Florida, Orlando, p. 302
4. Domazet, A. (2001). *Međunarodni marketing*, Ekonomski fakultet Univerziteta u Sarajevu, p. 101

5. Eslava, R. (2005). MVNOs to be or not to be?, *Telecom Strategies & Trends, InfoCom*, Issue 2005/8, p. 4-5
6. *Global Mobile*, the International business newsletter of mobile communications markets (2006). KPN seeks European MVNO, Volume 13, No.12, June 28, p. 7
7. Jović, M. (1997). *Međunarodni marketing*, Institut ekonomskih nauka, Beograd, p. 344, 381
8. Kotler, P. (1999). *Upravljanje marketingom*, VII izdanje, Informator, Zagreb, p.55-56
9. Kotler, P., Keller K., L. (2006). *Marketing Management*, 12th Edition, Pearson, Prentice Hall, New Jersey
10. Kristensson, S., Gahnström, A. (2001). *Mobile Virtual Networks Operators, Assessing MVNO Business Opportunities*, School of Business, University of Stockholm, p. 67
11. Lennighan, M. (2006). Mobile Virtual Network Operators Going to Extremes, *Total Telecom Magazine*, April 2006, p. 30
12. Yoshino, M.Y., Rangan U.S. (1995). *Strategic Alliances*, Harvard Business School Press, Boston, p. 5