



**TAMPERE POLYTECHNIC**

**BUSINESS SCHOOL**

**FINAL THESIS REPORT**

**THE OPERATIONAL ENVIRONMENTS OF THE FINNISH AND  
SWISS MOBILE OPERATORS**

**Harri Ruuska**

Degree Programme in International Business

June, 2005

Supervisor: Dr. Matti J. Haverila

**TAMPERE 2005**

# TABLE OF CONTENTS

1. INTRODUCTION TO THE RESEARCH .....	3
1.1 Background to the research .....	3
1.2 Research problem .....	4
2. MARKETING OF TELECOMMUNICATIONS PRODUCTS .....	5
2.1 Introduction .....	5
2.2 Customer behaviour .....	8
2.3 Customer behaviour and teleoperators .....	10
3. OPERATIONAL ENVIRONMENT OF TELEOPERATORS .....	12
3.1 History of telecommunications .....	12
3.2 The Finnish mobile services .....	13
3.3 The Swiss mobile services .....	15
3.4 Mobile cluster .....	16
3.4.1 Cluster analysis .....	17
3.4.2 Diamond analysis .....	18
3.4.3 Government's actions .....	18
3.5 Types of operators .....	20
3.6 Pricing models and strategies .....	21
3.6.1 End-to-end pricing .....	21
3.6.2 Segment pricing .....	22
3.6.3 Obstacles of pricing .....	23
4. ANALYSES OF TELEOPERATORS .....	24
4.1 Country profiles .....	24
4.1.1 Country profile of Finland .....	24
4.1.2 Country profile of Switzerland .....	24
4.2 Selection of companies .....	25
4.3 Finnish operators .....	27
4.3.1 TeliaSonera .....	27
4.3.1.1 Introduction .....	27
4.3.1.2 TeliaSonera Finland .....	29
4.3.1.3 Corporate governance 2003 .....	31
4.3.1.4 Outlook .....	32
4.3.1.5 Conclusions .....	32
4.3.1.6 Key success factors .....	33
4.3.2 Elisa Corporation .....	33
4.3.2.1 Introduction .....	33
4.3.2.2 Elisa's mobile sector .....	35
4.3.2.3 Corporate governance .....	37
4.3.2.4 Outlook & Conclusions .....	38
4.3.2.5 Key success factors .....	38
4.3.3 Finnet Group .....	39
4.3.3.1 Introduction .....	39
4.3.3.2 Finnet mobile sector – DNA Finland .....	41
4.3.3.3 Corporate governance .....	41
4.3.3.4 Outlook .....	42
4.3.3.5 Conclusions .....	42
4.3.3.6 Key success factors .....	42
4.3.4 Saunalahti Group .....	43
4.3.4.1 Introduction .....	43
4.3.4.2 Mobile sector of Saunalahti .....	44

4.3.4.3 Corporate governance .....	45
4.3.4.4 Outlook .....	46
4.3.4.5 Conclusions .....	46
4.3.4.6 Key success factors .....	47
4.3.5 Cubio Communications .....	47
4.3.5.1 Introduction .....	47
4.3.5.2 The GSM operations .....	48
4.3.5.3 The CDMA Network .....	48
4.3.5.4 Outlook & Conclusions .....	49
4.3.5.5 Key success factors .....	49
4.3.6 ACN Mobile .....	50
4.3.6.1 Introduction .....	50
4.3.6.2 ACN Communications Finland .....	50
4.3.6.3 Conclusions .....	51
4.3.6.4 Key success factors .....	51
4.3.7 Globetel .....	51
4.3.7.1 Introduction .....	51
4.3.7.2 GSM services of Globetel .....	52
4.3.7.3 Conclusions .....	52
4.3.7.4 Key success factors .....	52
4.3.8 Tele 2 .....	53
4.3.8.1 Introduction .....	53
4.3.8.2 Tele 2 mobile services .....	53
4.3.8.3 Conclusions .....	54
4.3.8.4 Key success factors .....	54
4.3.9 Emerging mobile operators .....	54
4.4 Swiss operators .....	56
4.4.1 Swisscom Group .....	56
4.4.1.1 Introduction .....	56
4.4.1.2 Swisscom Mobile .....	58
4.4.1.3 Corporate governance .....	60
4.4.1.4 Outlook .....	61
4.4.1.5 Conclusions .....	62
4.4.1.6 Key success factors .....	62
4.4.2 Orange Group .....	62
4.4.2.1 Introduction .....	62
4.4.2.2 Orange Communications Switzerland .....	64
4.4.2.3 Outlook .....	65
4.4.2.4 Conclusions .....	65
4.4.2.5 Key success factors .....	66
4.4.3 TDC Group .....	66
4.4.3.1 Introduction .....	66
4.4.3.2 TDC Switzerland .....	68
4.4.3.3 Corporate governance .....	69
4.4.3.4 Outlook .....	70
4.4.3.5 Conclusions .....	71
4.4.3.6 Key success factors .....	71
5. CONSIDERATIONS AND DISCUSSIONS .....	72
5.1 General .....	72
5.2 Future and trends .....	74
6. FINAL CONCLUSIONS .....	75
REFERENCES .....	77
ANNEX 1 Abbreviations .....	83

# 1. INTRODUCTION TO THE RESEARCH

## 1.1 Background to the research

This study analyses the current situation of the operational environments of the Finnish and Swiss mobile operators.

First, the marketing theories of how the marketing of mobile communications products and services can be implemented will be highlighted. Customer behaviour, customer satisfaction and customer relationship management have been illustrated.

Secondly, the operational environment analysis discloses the basic setting of the operational environment attached with a separate analysis of the Finnish and Swiss mobile operators' operational environments. Moreover, the concept of the mobile cluster will be explained and brought in line with the practical cluster analysis particularly directed at the teleoperators. The types of operators will be described and their pricing models and strategies explained.

Thirdly, the actual research has been done among the Finnish and Swiss mobile operators. The research was started from the country profiles and enriched by the analysis of mobile operators' product and service range, recent actions, positioning in the market, corporate governance, outlook, conclusions and key success factors. Finally, emerged operators will be analysed whose success story is about to start.

The last section of this study deals with the results of the research through considerations and discussions. An overview of the future outlook will be presented. Lastly, final conclusions will be drawn. The references show respectively the sources of this study and the annexes will give some background information.

## 1.2 Research problem

As a research problem I chose the following:

“What factors are there behind a successful teleoperator? Analysing the elements of competition.  
How the operational environments have changed and how changes affect the operators?”

The methods of this study are mainly qualitative. As the bibliography shows, sources of the analyses mainly comprehend for actual comparison purposes the material from the companies' annual reports, management reports, presentations or press releases. Additional information has been found from the Internet. The research on each of the teleoperators has been closed by a certain date forcing me to omit the most recent actions taken by the teleoperators after the closure of the research.

## **2. MARKETING OF TELECOMMUNICATIONS PRODUCTS**

### **2.1 Introduction**

The marketing of the telecommunication products can be classified as being marketing of the high-technology products. The marketing of such products differs from the marketing of more traditional products through altered features of marketing. (18)

The features of the marketing of high-technology products comprehend a shorter product life cycle that can last only a couple of weeks. Secondly, the need for the product or service does not necessarily exist from the start. When a need has been created by the market needs, the product or service has been created on the basis of the market push mechanism. However, if the demand for the technology has been created by the technological advancement, it is due to the technology-push mechanism. (18)

The challenges of marketing these products include gathering the required capital to design, initialise, implement and develop the products. The existence of marketing competence is crucial in order to create and maintain the customer relationships. Generally, the pricing may form an obstacle since at an early stage the prices of the new products or services are high allowing only the early adapters to purchase this particular product or service. (18)

In the beginning, the access to the efficient distribution channels can be limited. If the international expansion is on target, the contact acquisition has to be done carefully. The competition will be strict and has to be considered extensively and through proper marketing actions the competition can be challenged. The concentration on the research and development activities is highly important to be able to create a desirable final product. (18)

The methods of marketing of high-tech products contain defining a clear product concept attached with the market needs. As a next step, the infrastructure and availability of the required equipment have to be ensured. In some cases, the permission to introduce a new product in the market has to be received from the authority especially, if the market is regulated. The importance of the product testing and implementing the possible modifications is high. Moreover, the timing of the marketing of the high-tech products is an important aspect. (18)

There are alternative market strategies of how a company can introduce new high-tech products to the markets. The strategies are based on the notion whether the newness of a product or service is directed towards newness to the company or newness to the market. The elements of the alternative strategies are cost control and positioning in the market (consumers' evaluations). Based on these the market gap will be found. There are several variables which can be used for repositioning the product. If repositioning of a product or service is necessary, improvements to the existing products or services have to be made. Product strategy will be composed on the basis of the market strategy. (18)

As stated earlier, the importance of research and development activities is high. Here, product development process is a tool for companies through which they can achieve a better control over the R&D activities. The process consists of exploration, idea generation, concept development, business analyses, screening, prototype development, market testing, adjustments and product launch. The need recognition is one of the elements and many of the companies do not consider this aspect carefully enough. As an end-result, after a successful product development process, important resources can be saved and a company knows exactly the status of a certain phase. (18)

The adaptation curve facilitates the company to plan its marketing and sales management. The curve contains early adapters who are the first in accepting the company's products. The late adapters correspond to the major portion of consumers who wait until the product has generally been accepted among other consumers. In early maturity the market is well-developed. The late maturity shows that the product revenues are decreasing and the demand decreasing if adjustments will not be made. However, it is worth noting that the needs of the above-mentioned groups may differ. (18)

The product life cycle's stages can be used to illustrate the development of one product or the whole industry. It consists of four parts: introduction, growth, maturity and decline.

The companies behave differently at the different phases of the cycle. The costs and strategies of production, marketing, R&D and competition vary from phase to phase. In addition, the risk management is used depending on the phase. The amount of profits and margins will be observed in order to know when the product is transferring from phase to phase and what tools are used in implementing a suitable strategy. (18)

For instance, if looking at marketing in the introduction phase there are high costs of marketing because there is a lot of advertising in order to spread the knowledge over the new product. Amount of sales is increasing. At the growth phase advertising costs are moreover high but lower amount of sales is reached. At the maturity the amount of sales and advertising is declining even though advertising is still an important tool. The markets are segmented into smaller groups. Packaging is an important tool to promote sales. In addition, some extra services may be developed. At the decline phase the amount of sales and advertising is low because possibly a new product has been developed to substitute the existing product. (18)

For a company, an integrated strategy of implementing the technological advancement and marketing in line is the best option to be followed. The enormous financial resources alone do not guarantee the success of a company. The whole process has to be integrated involving all the departments in order to achieve an integrated R&D process. (18)



## 2.2 Customer behaviour

The heart of customer-oriented marketing is the efficient exploitation of the core marketing mix containing product, place, price and promotion. In addition to the core marketing mix, there has emerged more focused direction towards satisfying the customers' needs and even analysing and defining their motivations that are guiding the customers' behaviour. (45)

The aspects of the customer behaviour are implementing a segmentation of the customer base and creating profiles according to which segmented customers are expected to behave. The aim of these actions is to ensure the production and successful sales of customised products and services to the profiled customers. (45)

It is crucial to analyse the customers' needs, expectations, interests and motivations. One of the tools of figuring out these factors is storing of the customer behaviour data. However, the storing does not help at all if the company is not able to create trust and loyalty among its customers. The guiding shared values are trust, communication and mutual values which can equally be appreciated by the company and its customers. (45)

The financial success of a company measured in currency is not the only determinant of a successful performance especially, when the customer behaviour is concerned. There can be analysed six non-monetary elements which determine the prosperousness of the customer relationships: attention, information, association, service, loyalty and advocacy. The aim of this approach is to achieve a mutually rewarding relationship. (45)

The Attention means building of the customer awareness with perfect timing. Information refers company getting information on its customers and customers gathering information on the company to decide the next step. The Association meaning whether the brand reaches the customers' perceptions or not, containing the value creation and customer recognition. (45)

The Service is expected to enhance the customers' experience through personal or self-service appreciated by the customer. The loyalty is an interactive recognition from company to customers e.g. through special campaigns or from customer towards a company through long-lasting and beneficial relationship. The Advocacy meaning customer communicating positive experiences to other potential customers when social recognition and corporate remuneration will be reached. (45)

The customers understand loyalty through customised products and services satisfying their needs. It is crucially important to ensure the new customer inflow but simultaneously reward the existing customers due to their contribution to the product or service range. The existing customers can be rewarded by introducing special campaigns or other advantages. When acquiring new customers, the targeting alone is not enough, since the customer awareness has to be built. (45)

In the telecommunications markets, the new customers are rewarded by diverse campaigns such as no establishment fee for new customers or possibility of getting readily paid phone calls at a certain sum. The existing customers can be rewarded by price decreases of the monthly fees, telephone calls or purchasing new services at lower prices. For the existing customers, launching services that are not available for the customers' of other operators create added value that the customers appreciate. (45)

As described earlier, the relationship management has to be interactive and ready to be revised if necessary. An extended concept of relationship management refers additionally to the management of interest group relationships. The interest groups are customers, suppliers, financial authorities, distributors, employees, co-operation partners, competitors and society. The extended relationship management suggests that the interest groups should be equally treated as favourably as the key customers. (45)

One of the companies' aims is to create financial assets which guarantee the smooth growth and implementing of the future investments. The customer behaviour has to be analysed carefully in order to turn the success of the relationship management into positive financial performance. These elements have to be identified, planned, measured and transformed into financial assets. (45)

The importance of inter-dependent relationships is high. These relations facilitate the value creation that is the base for the relationship management. The ideal outcome has been reached when all the parties involved have found benefits. Through a successful relationship management a clearer and more profitable segmentation and advanced service model can be reached. (45)

## 2.3 Customer behaviour and teleoperators

This section is based on my own findings on the annual reports of the researched teleoperators. Please see the following sources as background material (10, 14, 25, 32, 36, 39, 42). In practice, the customer behaviour and loyalty can be separated consisting of the following elements needed to build the customer relationships successfully:

First of all, the product and service range has to be desirable from the customers' point of view. The pricing has to be implemented in manner that suits the perceptions of the customers. The availability of the products has to be ensured either through physical selling points or self-service online shops in the Internet. The promotion is crucial in order to maximise the product awareness.

One of the aspects that customers' appreciate is the quality of the services offered. The network is one element of the infrastructure and the mobile devices on the market as well. The ease of using the services and possibility of changing the service range are important. The flexibility of fulfilling the orders made by the consumers has become a key concept after the introduction of the mobile number portability that caused queues in receiving a new subscription.

The quality and availability of the customer care can be seen as crucial factors. For instance, TeliaSonera's customer care aims to answer 80 % of the incoming calls within the first minute (42). Smaller operators have emphasised their ability to provide more flexible and dynamic customer care than their bigger competitors. The friendliness, level of professionalism and problem-solving skills of the service staff are factors affecting the customers' perceptions.

In addition to the customer care, the product support is a valuable section. Especially, the more services are transferred as being self-services, the more there is need for personal service in case of any problems occur during the self-service activities. The same measurement criteria of the service staff can be applied to the product support services as to the customer care activities.

The success of the operation of the service staff depends on several factors. The employee satisfaction is surely the most important one covering education, training, working conditions and tasks, career building, methods of rewarding and general

equality at the workplace. More satisfied employees' rate of retention and productivity are higher leading to the end-result of being able to produce high-quality customer care or product support activities.

In many companies they have created mission, vision and internal values to be followed. It is important to communicate these affairs from the top management to the whole organisation. It is crucial that every employee knows what happens and what is going to happen next. A perfect communication is challenging but worth implementing.

In order to maintain the customer loyalty, teleoperators have run extensive marketing campaigns to retain the existing customers and strengthen the customer inflow. The introduction of the family and friend tariffs between the callers has also strengthened the loyalty. However, some of the customers appreciate low prices and some availability of the customer care. The teleoperator has to segment its subscriptions based on the customer preferences.

### 3. OPERATIONAL ENVIRONMENT OF TELEOPERATORS

#### 3.1 History of telecommunications

In the beginning the main purpose of the telecommunications was to produce services enabling people to communicate through voice services. At the early stage the infrastructure and network was available only for a very few people and at that time the service range and connections were highly limited. (21)

Since service range become wider and availability of the equipment to communicate improved, people started to use these services more extensively. However, many of the service providers were owned by the governments and they possessed a monopoly over the domestic market, blocking the access from other companies that wanted to increase the service range and capture market shares. (21)

In 1990's in Finland and Switzerland the liberalisation of the telecommunications sector took place. In Finland, TeliaSonera's monopoly had been abolished in 1994. Since that, the technological advancement has been considerably rapid. Moreover, the service range has become an essential part of the key success factors of the companies. Many companies have also chosen to enter foreign markets to gain better position. (21)

In Finland, the birth of telecommunications cluster was based on technological advancement and favourable economical factors. All started from state's role of supporting network operations. Furthermore, decentralised structure of the industry and the liberalisation of the whole telecom sector contributed strongly to this story. Other supporting factors are government's favourable industrial and educational policies. Encouraging innovations has also influenced strongly. (21, 13)

In Switzerland the telecommunications sector was partially liberalised in 1998. In 2003, the Swiss telecommunications markets were the seventh biggest in Europe. Recently, the government has considered full liberalisation. So far, the liberalisation has not covered e.g. interconnection fees but full liberali-

sation is now on target. However, this requires changes in the Swiss telecom legislation. (38, 9)

Swisscom's power as a monopoly company has been strong. Of course, there have emerged two other main competitors that are mainly competing with the prices and services. However, due to the remaining partial monopoly, the Swiss telecom market is not totally free yet. Further liberalisation would bring more innovative solutions and growth potential to new or smaller companies. (9)

### **3.2 The Finnish mobile services**

The private mobile services can be divided into person to person messaging, content services and data services. The total value of the Finnish mobile communications markets in 2003 was EUR 226 million. In 2003 in Finland there was some 4.7 million GSM subscriptions in total. (34)

Due to the launch of more advanced technologies, there was a clear transition phase in the Finnish mobile service markets around 2002 and 2003 from core mobile services to the advanced value-adding services. The transition was enabled through the favourable development of the mobile device manufacturers and teleoperators. As the only limitation at present can be seen the limited speed of the data transfer services in the GSM network that is expected to be remarkably increased in the UMTS and other networks. (34)

All of the three key areas (person to person messaging, content services and data services) experienced an increase. 60 % of the total value was generated by the person to person messaging and the rest by the content and data services. In 2003, Finland was the second when ranking the cheapest mobile communications markets in Europe. (34)

The fastest growing separate sector was wireless data services through the GPRS. The roll-out of the content services has contributed positively to the development of polyphonic ring tones, colour background images, Java-games and other applications upon download. The Finns do send plenty of text messages (SMSs) even though new services have been launched. The total value of the SMS markets was EUR 192 million in 2003 that corresponds to 1,5 billion sent messages. (34)

The growth of the Finnish mobile communications markets is highly dependent on the introduction of the new technologies and applications. The penetration of the new mobile phones being able to enable the use of the new services creates an essential prerequisite for the growth of the mobile communications markets. The data and content services are expected to be among the growing sectors during the coming years. (34)

The pricing affects the market behaviour as well. Reasonable pricing increases the use of the services and higher prices might decrease the usage if value-adding services do not compensate the price increase.

The total number of the subscriptions has increased but the number of the active users of the subscriptions has remained at the same level compared to the previous years. (34)

The mobile number portability, introduced in July 2003, has increased the liveliness of the Finnish mobile communications markets. It has brought an increased competitive pressure and forced the strong players to decrease their pricing. The average prices have already decreased and on the other hand, the volume is expected to increase. The existence of new competitors has also increased the competitive pressure. (34)

The expansion of the mobile communications markets in Finland requires new innovations generated by the teleoperators. The importance of new customer inflow and customer retention is high as well. The investments in the new technologies and the introduction of these new technologies are crucial to guarantee the favourable development. (34)

As noted earlier, the increased speed of the UMTS network is expected to expand the roll-out and usage of more advanced mobile services. However, according to the teleoperators, the GSM network already allows the running of the similar services at lower speed. Thus, the teleoperators' decisions to invest in a more modern technology create a base for the technological environment. Likewise, the availability of the suitable phones has to be ensured before launching new services.  
(34)

### 3.3 The Swiss mobile services

Switzerland is not a member of the European Union. However, the liberalisation of the Swiss telecommunications markets has been implemented according to the practices in the EU. The telecom sector was partly liberalised in 1998 and has not been fully liberalised yet. The liberalisation does not concern copper wires, leased lines and lines owned by Swisscom. However, open competition allowing new competitors to enter has been enabled.

(12)

The Swiss mobile service market has been dominated by the three main players. However, Die Eidgenössische Kommunikationskommission (ComCom) granted a licence for two new competitors to enter the Swiss market soon. Tele 2 and In&Phone are expected to launch their services to private and corporate customers during the coming years that is expected to increase the competitive pressure and the launch of more innovative services.

(6)

In Switzerland, there are some 6,2 million GSM subscriptions. The structure of the services is similar compared to the Finnish mobile services market classifying the private services into person to person messaging, content services and data services. The total value of the Swiss telecommunications markets was not disclosed at all.

(6)

As in the Finnish mobile service market, in the Swiss mobile market there can be seen a transition from the core services to the value-adding services. Data transfer and content services are increasing rapidly. Switzerland is among the countries in Europe, where there are the highest prices in use for the mobile services.

(6)

The fastest growing sector in Switzerland is the data transfer services. The portion of the content services has grown steadily and both sectors are expected to develop positively during the coming years. The number portability has also been introduced in Switzerland.

(6)



### 3.4 Mobile cluster

Before clarifying the cluster theory, it is worth explaining the concept of the national competitiveness, that creates the base for the cluster's existence. Concisely, the national competitiveness defines the nation's productivity. As variables can be seen the standard of living, strategic decision-making, do advantages of high productivity exist and does the environment encourage improvements and investments. (22, 31)

Michael E. Porter introduced a diamond of national advantage containing

- \* factor conditions (human, physical, knowledge and capital resources attached by the infrastructure)
- \* demand conditions (segment structure, sophistication of buyers, anticipatory buying needs and internationalisation attached by the size of market and growth rate)
- \* related and supporting industries (complementarities and networking and co-ordination)
- \* corporate strategy, structure and competition
- \* chance (unpredictability)
- \* government's actions (change in the factor conditions or government's policies) (22, 31)

All of the above-mentioned factors can affect the others. However, the interaction of these factors followed by an end-result can vary and is dependent on other factors and their development. The portion of a factor can change over time and in some cases it is extremely difficult to anticipate the future development. Moreover, there is a constant movement in the system of national competitiveness. (22, 31)

The competitive advantage has to be created. One notion of the national competitiveness is that the creation of dynamic but sustainable advantages is far more important than following only the industrial policies with a traditional and obviously investment-centered emphasis. Maintaining flexibility is a challenge but one of the crucial prerequisites. (22, 31)

From companies' stand-point it is crucial to create an environment that encourages investments and maintains the dynamics. Being anticipative is an important notion to be able to launch

products and services as the first in the market. The competition is a threat but it should be seen as a motivating factor as well. (22)

### **3.4.1 Cluster analysis**

Michael E. Porter has defined a cluster as “a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities”. (Porter 1998, p. 199).

In a cluster, there are companies producing the products or services, suppliers, financiers, companies in related industries, customers, providers of infrastructure, government and other institutions and agencies for standardisation. The synergies can be created facilitating the operation of each party. (22, 31)

Within a cluster competition is more intense, since the productivity of the companies is expected to be higher. Moreover, their capacity for innovation is stronger and more manageable. The formation of new businesses is accelerated that enables the birth of new innovations and finally, the size of a cluster will be bigger. However, a cluster itself does not guarantee its success, since the vulnerability of a cluster increases while it grows. (31)

In this paper, the companies described belonging to the mobile cluster are mainly producing voice services through fixed or mobile network, data service solutions for instance through text or multimedia messaging services and various Internet communications solutions. (22)

Naturally, the companies in the mobile cluster are heavily driven by the following elements: technological development, infrastructure advancement, customer orientation, co-operation and partnerships. One of the challenges is proportion of large investments in building the technological capabilities in order to serve the customers properly. Because of the intense competition, profit margins will remain low and possibilities of organising funding for these investments are limited. Because of these reasons, many telecommunications companies have run efficiency programmes to achieve better cost control. (22)

### 3.4.2 Diamond analysis

The factors and forces of the production in the mobile cluster are

- \* technical infrastructure
- \* market knowledge
- \* products and services
- \* financial resources
- \* distribution channels
- \* skilled and motivated employees
- \* innovation
- \* willingness to improve
- \* quality
- \* government's role (22)

During the past years, competition has become more intense due to the larger number of competitors. Service range has also expanded from core services (enabling communication) to extensive information deliveries. Besides services, advanced security is important value-adding to protecting privacy or for instance, corporate affairs communicated through mobile devices. (22)

Customers are more critical towards provided services than before. Customers know more about the products and services and they surely will search for another provider if they are not happy with the present operator. One recent feature in the market is tough price competition. Of course, customers are happy with lower prices of the same service but then the provider can emphasise for instance the additional services provided or value-added services that help retaining the customer. (22)

In this paper, the teleoperators (network and service operators) have been the object of researching. However, the mobile cluster is a wider concept containing application developers, certification authorities, component and network manufacturers, consultancies, content owners and providers, educational institutions, end-users, financers, network operators, platform developers, regulatory authorities, service operators, standardisation organisations and terminal manufacturers and retailers. (22)

### 3.4.3 Government's actions

As described shortly earlier, Porter sees government's role as a provider of the infrastructure and policies but simultaneously

as an influential authority. The role of the governments has changed during the past years due to the globalisation from a domestic-centered observation to the notion of observing also the strategies' of other governments. (22)

The governments should improve the factor conditions the way that encourages companies' performance. Moreover, they should accelerate the standardisation concerning e.g. the product safety and technological advancement to be able to meet consumers' desires more precisely. The governments have to ensure the healthy development of the competitive environment. However, the co-operative research has to be permitted under certain conditions. (22)

In the mobile cluster, government's actions have been and will remain important. As mentioned earlier, the liberalisation of the telecommunications sector was a remarkable step towards more extensive services and different price structure. However, governments should be more careful with the level of corporate taxation and shareholder taxes. Moreover, Finland's and Switzerland's strong policies of education have strongly supported the birth of mobile clusters. However, reallocating the budgets may endanger the future of birth of new innovations. (22)

In Finland and Switzerland, government has had an important role in creating the infrastructure and technological base for telecommunications. In the beginning, they also ran programmes to improve the operation of the companies within the cluster. Their role in initialising this cluster has been an important one but during the past years they have decreased their participation in the decision-making due to higher degree of privatising. (22)

As in Finland, also in Switzerland there are restrictions for the payments of leasing the GSM network for service operators. Of course, service operators will exploit this new opportunity. This action taken by the government still shows, that they can use their decision-making power to change the market conditions and indicates their role as an influential authority. (22)

### 3.5 Types of operators

The licensed MNOs (Mobile Network Operators) possess their own network to run mobile communications services. In Finland, these operators are TeliaSonera, Elisa Communications and Finnet Group. In Switzerland, Swisscom, Orange and TDC possess their own networks. (20)

The Mobile Virtual Network Operators (MVNOs) and Service Operators (SPs), however, do not possess the network. They lease the network capacity from the hosting operators (MNOs). There can be recognised a European-wide increase in the number of the MVNOs. In Finland, the MVNOs are Cubio, Globetel, Saunalahti and Tele 2 and SPs are PGFree, NetFonet and Hesburger. At present, there are no MVNOs or SPs in the Swiss mobile communications market. (20)

The MVNOs are independent operators having their own SIM cards, numbering resources and infrastructure to offer competing services from the MNOs' point of view. The MVNOs can formulate the inter-connection agreements with any chosen network operator. However, service providers have to acquire the network services from the MNOs or MVNOs and SPs' inter-connection or other agreements are bound to the agreements chosen by the hosting operator. (20)

The service operators can be classified as ordinary service providers (SPs) or providers of enhanced services (ESPs). SPs' product or service range can contain the products produced by the hosting operator running under the brand of the hosting operator or branded separately by the SPs. Service providers' customer and billing management can be implemented independently but the network services are produced by the host. (20)

The enhanced service providers' SIM card can be branded separately from their host's card. The equipment in use enables advanced service production. However, the network services are produced and charged by the host operator.  
(20)

## 3.6 Pricing models and strategies

A teleoperator has two options how to set prices for its services. In this text, two pricing models are introduced which are applicable to differing operational environments.

### 3.6.1 End-to-end pricing

This model is applicable to the environment where a single operator possessed a monopoly over the whole market. Similarly, in Finland and Switzerland, the market has been firstly controlled by a single operator but in the 1990's the competitive environment has changed. (46)

The service operators pay for the services leased from the network operator on the basis of the real usage. The origination charge refers to the charge of entire call deducted charges paid to network operator. (46) The pricing models are:

- 1) Non-discriminatory
  - origination fee + mobile termination fee
  - equal termination or retail charges for all of the service operators
  - difficult to compare wholesale prices
- 2) Price discrimination against operators
  - the host has a right to charge the differences of mobile termination fees
- 3) Selected contract-based operators
  - favouring e.g. one and only service operator through lower origination fees
- 4) Price discrimination
  - centralised and unified pricing structure for all of the fixed and mobile services regardless which service operator
- 5) Subsidising competing operator through lower origination fee
- 6) Discrimination against own operator
  - due to price regulations or price reductions differing from the contracts (46)

The Finnish pricing follows the non-discriminatory model. The prices are more transparent than before. Earlier, the problems

have been the overpricing of the fixed origination and mobile termination fees creating unfavourable conditions for competing. (46)

### **3.6.2 Segment pricing**

This model is applicable to a multi-operator environment where the full competition is allowed. Customer can use the services of several operators and can see the usage in the telephone bill e.g. to which operator the customer has called. Finland and Switzerland have already a suitable environment for the segment pricing. This model allows lower mobile termination fees due to not charging wholesale components that bring an advantage to the service operator. (46)

The billing of the mobile services can be done by the service operator or by the network operator. The network operator charges a billing fee that is based on the percentage-based provision. In 2003, the fee of billing was between five and eight percent per bill. (46)

The segment pricing and open competition have brought several advantages. Customers do have more choices and lower prices have boosted the competitive environment and service development through higher volume. Service operators' entry has been made easier than before through easier access to distribution e.g. through the option of outsourcing some of their activities to the network operator. (46)

The number portability introduced in Finland and Switzerland, is one implication of segment pricing as well. The end-to-end pricing does not allow such operational structures so the segment pricing was the only method to be followed. The birth of Mobile Virtual Network Operators would not have been possible either without this transition. (46)

### **3.6.3 Obstacles of pricing**

Earlier, a monopoly of one single company in both countries, Finland and Switzerland, had blocked the termination fees concerning telephone calls from a mobile phone to the fixed network and vice versa. However, this sector has been opened for free competition recently in Finland and in Switzerland. (46, 6)

The termination fees forced some of the operators providing subscription types where calls created losses to them due to the high termination fees. The pricing policies in Finland have earlier been unfavourable and illogical enabling regulated termination and retail charges. However, the telecommunications legislation changed recently eliminating these challenges. (46)

In Finland, the popularity of the flat-rate subscriptions has increased during the past year. Non-discriminatory pricing allows operators to launch such subscriptions since the mobile termination prices are the same despite of the operator, bringing more equality in the markets. (46)



## **4. ANALYSES OF TELEOPERATORS**

### **4.1 Country profiles**

#### **4.1.1 Country profile of Finland**

In Finland there are some 5.2 million inhabitants. In the economy, there has occurred a clear transition from forest or agricultural emphasis to a sophisticated industrial, free market economy with manufacturing as a main sector. Finnish economy is export-driven by one-third share of GDP exported. Finland is a member of the European Union. (4)

In 2003, the real growth rate of GDP was 1.9 %. However, its development is expected to be more favourable during 2004. Inflation rate in 2003 was 0.9 %. The problems of Finnish economy are relatively high rate of employment amounting to 9.0 % in 2003 and unfavourable taxation. In 2003, the exports was worth of \$54.28 billion composed mainly of machinery, equipment, chemicals, metals, timber, paper and pulp. In 2003, the imports was worth of \$37.35 billion composed of foodstuffs, petrochemicals, vehicles, machines and textiles. (4)

In 2003, the number of telephone main lines was 2.548 million. Number of mobile phones at that time was respectively 4.7 million. Number of Internet users in 2002 was 2.65 million. Finland has an excellent infrastructure to provide telecommunications services. (4)

#### **4.1.2 Country profile of Switzerland**

In Switzerland, there are some 7.45 million inhabitants. The country is known as independent and neutral with a multi-cultural esteem. Swiss economy is a prosperous, modern market economy with stable development enabling wealthy standard of living. Switzerland is a landlocked area which has influenced on its trading. (5)

In Switzerland, the unemployment rate is 3.7 % and inflation rate 0.6 % in 2003. Highly skilled labour is available. However, the challenges comprise a stagnating economical development with a negative GDP real growth rate of -0.5 % in 2003. Exports was worth of \$110 billion composed mainly of machinery,

chemicals, metals and watches. Imports in 2003 was worth of \$102.2 billion composed of machinery, chemicals, vehicles, metals and agricultural products. (5)

In 2002, the number of telephone main lines was 5.419 million. Number of mobile phones in 2003 was 6.172 million. Number of Internet users in 2002 was 2.556 million.

Switzerland has an excellent infrastructure to offer telecommunications services. (5)

## 4.2 Selection of companies

For the research purposes, I have analysed each of the players in the telecommunications sector operating either in Finland or in Switzerland. In Finland the main players are TeliaSonera, Elisa Corporation and Finnet Group. However, smaller service operators such as Saunalahti, ACN Mobile, Cubio Communications, Globetel, Tele 2 and Operator 3 have shown that a smaller service operator can be a powerful competitor as well.

In Switzerland, the main players are Swisscom Group, Orange Group and TDC Group. However, the Swiss market structure differs greatly from the Finnish one, since in Switzerland such smaller service operators leasing the network capacity from bigger operators do not exist at all. The population in Switzerland is bigger compared to the population of Finland and it seems that there is still room for the new smaller competitors in Switzerland as well.

ACN Inc. is not described among the Swiss operators since they only offer fixed line services to Swiss consumers at present. According to their website, in the future, they will launch mobile communication and Internet solution products to the Swiss consumers as well. Their market entry to the Swiss markets will change the competitive environment in Switzerland and it is exciting to see how the Swiss markets will develop. (3)

Some of the teleoperators have only concentrated on the domestic service production. However, some of the teleoperators are strong international players as well. The analysis of the teleoperators has mainly been directed at the core services offered.

Especially, when analysing the Finnish operators, it has been brought to my attention that smaller teleoperators, such as Cubio Communications, do not want to disclose any further infor-

mation on the activities occurring at the company except for the information provided at their web site. They want to retain the confidentiality as strong as possible to prevent any harmful actions taken by their competitors.

As the bibliography shows, sources of the analyses mainly comprehend the material from the companies' annual reports, management reports, presentations or press releases. Additional information has been found from the Internet. The research on each of the teleoperators has been closed by a certain date forcing me to commit the most recent actions taken by the teleoperators.

For actual comparison purposes the material from the companies' annual reports, management reports, presentations or press releases. Additional information has been found from the Internet. The research on each of the teleoperators has been closed by a certain date forcing me to omit the most recent actions taken by the teleoperators after the closure of the research.

## 4.3 Finnish operators

### 4.3.1 TeliaSonera

#### 4.3.1.1 Introduction

TeliaSonera is a leading telecommunications company in the Nordic and Baltic countries. Its head quarters is located in Stockholm, Sweden. TeliaSonera has been established on the basis of the merger of the leading telecommunications companies Telia in Sweden and Sonera in Finland. Earlier, Sonera had the monopoly over Finnish telecommunications markets before market liberalisation. (42)

TeliaSonera's net sales reached SEK 81,772 million (2003) and SEK 81,937 million (2004). The main segments comprise of mobile customers, fixed subscriptions and Internet services. In addition to these segments, there are also the Baltic, Russian, Euroasian and Turkish mobile telecommunication customers. In 2004, the total number of TeliaSonera's customers was 63 million (30 % increase). The customer base is divided into direct and indirect customers. Indirect customers are the customers of the associated companies.

The total number of employees in 2003 was 26,188. (42, 44)

Their business concept states:

"TeliaSonera offers reliable, innovative and easy-to-use telecommunication services for carrying and packaging of voice, images, data, information, transactions and entertainment in the Nordic and Baltic countries, Russia and selected Eurasian markets. We also offer wholesale international carrier services between selected destinations in Europe and across the Atlantic." However, the international carrier services have been divested in 2004.

(42 TeliaSonera annual report 2003)

Vision 2010 indicates

"In essence customers

- "fulfill everyday wishes and obligations with less effort.

## Services

- Simplicity makes a real difference.

## Ourselves:

- A genuine service company worth being proud of working for.

## Growth:

- A major player in the European service industry.”  
(42 TeliaSonera annual report 2003)

TeliaSonera's markets have been divided into following divisions: TeliaSonera Sweden, Denmark, Finland, Baltic countries, Norway, Russia, Turkey and Eurasia. The CEO of TeliaSonera is Mr Anders Igel. (42)

In December 2002, the Nordic market leaders Telia and Sonera merged.

They have reached the desired advantages faster than they planned. First of all, they wanted to achieve better profitability through cost savings and capital expenditure savings. They have also exploited from coordinating research, development and product management. Overlapping functions have been minimised. The development of shared service platforms has also created synergy. As an example, in international roaming calls from Finland to Norway, they do not have to lease the network from the competitor, because they own the whole network.

Integration of systems and infrastructure has also been successful. (42)

Furthermore, they have also strengthened their position in purchasing services and products. Search for suitable suppliers e.g. in the fields of network equipment, service platforms and IT consulting services has created cost savings. Concentrating on the core business functions is crucial so they divested around 30 companies in 2003. (42)

The merger was completed in 2003. At the moment, they are working with how to communicate the vision and shared values at the each level of the organisation. Efficient division of responsibilities with control facilitates this communication. The values consist of working close to the local customers while achieving cost-savings through not harming the service development. (42, 44)

They believe that improved customer loyalty is created through offering services adding real value. New offer campaigns were introduced, services simplified and customer care activities improved. A better market position was reached in all main sectors. (42, 44)

According to their Year-end Report 2004, they have reached a solid financial performance through an improved result. The development of their home market and international operations has been favourable. Despite their highly positive profit, they launched a redundancy programme in February 2005 to decrease the number of the personnel dramatically especially in Finland and Sweden. (43, 44)

#### 4.3.1.2 TeliaSonera Finland

TeliaSonera operates in Finland under Sonera brand that has been attached with a wide product portfolio. Sonera possesses the position of market leader in Finland in mobile, broadband and corporate data services. Among three other companies, Sonera also offers fixed subscriptions. The most important competitors in mobile communications are Elisa Communications and Finnet Group, with their own GSM networks. These will be described later in the text. (42)

Sonera, Elisa Communications and Finnet Group got the UMTS licenses. Additionally, there are smaller service providers and IT providers that address their services nationally or to a certain geographical area. All together, there were 13 mobile service providers in 2003. The service providers buy the capacity from mobile communication network companies. Sonera also provides wholesale traffic and network capacity with a market share around 25 % in 2003. (42)

Sonera offers high-quality GSM network with extensive mobile services. The GSM network reaches 99 % of the population and 97 % of the geographical area. Due to the co-operation agreements Sonera's subscriptions can be used in 161 countries. Mobile communications gather more than 60 % of Sonera's sales figures. (42)

In July 2003, the mobile number portability was launched. There was an increase in the mobile communication and Internet (broadband) segment. However, generally, some 313,000 mobile customers switched the operator that year. (42)

In 2004, the number of end customers in the mobile sector dropped by 131,000 to 2,297,000. Sonera leases its network to service providers and the number of the service providers' customers increased by 400,000 totalling to 578,000. They estimated that Sonera lost customers during the first three quarters of 2004 but the establishment of Tele Finland as being a subsidiary of Sonera improved their competitive position. Tele Finland offers reprofiled products and services to reflect better the demand for lower prices. (44)

Finland's telecommunication markets have high rates of penetration and usage of telecommunication services. In 2003, penetration rates with mobile communication was 90 %, consumer fixed subscription 64 %, consumer Internet access 47 % and consumer broadband access 8 %. However, prepaid cards have not reached success as desired earlier. (42)

In 2003, Sonera introduced the EDGE network, that enables high-speed mobile data services in the GSM network. The speed of the EDGE is even from two to three times higher than in the GPRS. For Internet customers the voice over IP was launched. For consumers, a single customer care number was introduced. Before, e.g. price enquiries, technical support and billing information had their own separate telephone numbers and customers got confused about it. Furthermore, Sonera continued to develop easy to use mobile Internet services. (42)

In 2003 and 2004, in mobile communication markets, the competition got harder. A new situation forced Sonera to reconsider its mobile subscription types. They launched a new type of subscription for youth, ZeroForty, which monthly fee includes sending of 1,000 SMS messages and single rate domestic calling. Moreover, Sonera One subscription also guarantees single rate domestic calls. The demand for flat-priced subscriptions has increased due to the mobile number portability. (42, 44)

Some innovative extra offers were also developed and implemented.

During 2004, they had campaigns concerning no monthly or subscription fees for new customers or call and send messages as much as they like during certain weekends and pay maximum one euro for that. (42, 44)

Sonera's distribution channels are relatively extensive. Services are distributed through their own sales force, customer care and external resellers through which they have more than 1,000 outlets around Finland. Internet selling has also been increasing. (42)

#### 4.3.1.3 Corporate governance 2003

Since TeliaSonera's headquarters is in Stockholm, it is a Swedish public company. It follows the Swedish Companies Act and its own Articles of Association. The shareholders' meeting is the highest decision-making body. One share is worth of one vote. In Annual General Meeting liability exemption of Board of Directors, profit allocation, selection of Board of Directors and auditors with compensation methods are on the agenda. In shareholders' meeting decision-making is practiced concerning share issues and option programmes. (42)

The Board of Directors (9 non-executive members and employee representatives) implements the organising and administering of the company. It also participates in the strategy formulation and implementation and nominates the CEO. The CEO does not belong to the Board of Directors and is liable for strategic development and business control besides managing the day-to-day activities.

The Board of Directors may establish committees if needed. In 2003, remuneration, audit and nominating committee existed. (42)

TeliaSonera follows good corporate ethics. This has been ensured by the operation of the CEO and Board of Directors. The good ethics are being followed at the each level of the organisation, so it is not only a task of upper management. (42)

There are 822,306 shareholders in TeliaSonera (Dec 2004). The main shareholders are the Swedish (45.3%) and Finnish (13.7%) states. The second largest shareholder group is Swedish and Finnish institutional investors. (42, 44)

TeliaSonera share can be found in Stockholm and Helsinki Stock Exchanges. The trading of TeliaSonera shares was closed on Nasdaq in August 2004. In 2003, the price of the share increased by 13 %. TeliaSonera aims to make important information available through its own standards through fulfilling the needs of shareholders and international financial authorities and community. They publish annual report, quarterly reports and press releases. (42, 44)

TeliaSonera has four geographic profit centres: 1) TeliaSonera Sweden, 2) TeliaSonera Finland, 3) TeliaSonera Norway, Denmark and Baltic countries and 4) TeliaSonera International. This gives a better control over core functions, increases flexibility and enables faster decision-making.



These centres are liable for profitability and customer satisfaction as well as for operational resources. (42)

#### 4.3.1.4 Outlook

It is worth noting that Finnish mobile communication markets will be saturating soon. However, there is an increasing trend in mobile services usage. The usage will be observed and adequate actions taken. At the moment, especially, the additional voice and data services will be on target.

Generally, the number of fixed subscriptions is declining. However, Internet and data services are growing. (42, 44)

Sonera continues providing simple but developed services. Customer care is under continuous improvements. Mobile data communications services are a growing sector in which Sonera has capacity to enter. However, in 2004, absolutely tough competitive pressure in Finland in the mobile communications markets was and will be a tough challenge to face in the future. (44)

Changes in the legal environment will be expected. Currently, TeliaSonera has been claimed by its competitors for charging excess prices of interconnection fees. These competitors will ask for reimbursement and compensation for damages as well. Additionally, the renewed legislation concerning pricing for calling from a fixed subscription to a mobile will be followed from March 2005 on. (20, 44)

#### 4.3.1.5 Conclusions

The introduction and development of new technologies in the mobile, fixed and Internet communication will increase the competition. In addition to that, customers' demand more and more that has to be observed and attached with the proper actions. TeliaSonera wants to achieve a better control over the associated companies by increasing the shareholding especially, in the Baltic region, Turkey and Russia.

The positive development of the home market (Nordic and Baltic region) is highly important. They will continue producing full range of telecom services in Finland, Sweden and Baltic countries. In Norway and Denmark they will provide a focused product portfolio.

Importance of simple pricing and flexible feedback gathering is high.

In the future, TeliaSonera wants to be a genuine service company. It is not an easy task but they feel confident due to the successful merger, highly-skilled employees and strong financial position. They have also improved the technological assets on which it is easier to build their future success. However, dramatic changes take place in the operational environment.

#### 4.3.1.6 Key success factors

- meeting customers' needs
- simple and clear products and services
- anticipating customer needs
- feedback from the customers
- product safety
- reliable
- exploiting high-quality technology

Average traffic volume 2003 (Finland)

160 minutes/month/customer

SMS messages 28/month/customer (42)

### 4.3.2 Elisa Corporation

#### 4.3.2.1 Introduction

Elisa Corporation's main offering includes telecommunications services, call centre services management, ICT and other telecommunication solutions. Elisa's market area comprehends Finland as a main market area and Estonia. One of their critical success factors is efficient partnering with Vodafone and Telenor. (10)

In Finland, Elisa is divided into three units: customers, products and networks. For financial purposes Elisa announces the respective figures categorised into mobile, fixed network, other businesses and corporate functions. Elisa's share can be found from Helsinki Stock Exchange.

The total number of employees in 2004 was 5,376. Elisa's headquarters is in Helsinki. (10, 11)

In 2003, in Finland, Elisa possesses the position of market leader of the fixed subscriptions in Finland with 35 % market share. In mobile operations, its market share is the second largest right after TeliaSonera with the share of 32 %. In Germany, Elisa produced city carrier business services but divested that section in 2004.

In Estonia, Elisa is the second largest mobile operator. Elisa's main customer segments are small and medium-sized corporate customers and private customers. The CEO of Elisa Corporation is Mr Veli-Matti Mattila. (10, 11)

Their vision indicates:

"Elisa aims to be the most attractive and effective operator."  
(10 Annual Report 2003)

Year 2003 was a real story of how to manage heavy internal changes with extremely high internal and external pressure. The whole organisation was heavily rationalised as well as operational models and structural changes. This rationalisation concerned everybody within the organisation from cleaners to top management and after dramatic personnel negotiations finished in January 2004, even 900 persons (24 % of the workforce) were fired during 2004. This profitability improvement programme continues till 2005. (10, 11)

The rationalisation also changes the organisational structure. Elisa implemented a merger with its own subsidiaries which represent the mobile communication, fixed networks and other network technology-related fields. This merger was implemented in July 2004. This integration activity is required in order to reach better control over the key areas, more flexible service level and balance the overall structure through simpler organisational form. Elisa's subsidiaries represent the fields of software development, product business, system services and real-estate IT services. (10, 11)

To manage this drastic reorganising, Elisa offered change support to employees e.g. through establishing a crisis hotline, open discussions and Intranet forums. They also organised briefings for redundants where they covered new employment or study opportunities or even entrepreneurial studies. They also introduced a supportive plan for continuing employees because this situation is not either easy for them and because of changes in the job descriptions.

Supervisors received also training how to manage this new phase. (10)

#### 4.3.2.2 Elisa's mobile sector

As TeliaSonera does, also Elisa leases its network to service providers. In 2003, they completed negotiations with encouraging contracts with Cubio Communications, Tele 2 and Song Networks that represent the mobile communication field. Additionally, a contract with MTV3 (national commercial TV station) was completed. One of the most remarkable institutional customers is the Finnish Ministry of Labour which brought a long-term co-operation agreement with Elisa covering entirely telecommunication services throughout Finland. (10)

Partnering with Vodafone enabled the introduction of EuroCall that guaranteed single-rate pricing of the international calls, sending of MMSs and full GPRS data transfer services in Europe. With Telenor they negotiated a preferred partner co-operation agreement that facilitates the extension of e.g. land-line telecom services in other Nordic or Baltic countries. (10) In 2003, Elisa also took an advantage out of number portability that influenced positively on their performance. As TeliaSonera did, also Elisa divested non-core businesses for instance, a directory service business was sold. Actually, they also sold the city carrier business service unit in Germany due to the low returns. (10, 11)

For the mobile telecommunication companies, years 2003 and 2004 seemed to be years of price competition with substantial offers and service campaigns. Despite the competition, there was 2,4 % increase in Elisa mobile subscriptions in 2003 totalling to a number of mobile subscriptions 1,347,146. In 2004, the total number of mobile subscriptions was 1,383,515. (10, 11)

Furthermore, the personal use of mobile subscriptions and mobile services is growing.

In 2003, the mobile sector generated 49 % of the annual corporate revenues. Mobile business revenues increased by 3,1 %. However, revenues by service providers decreased. (10)

As TeliaSonera did, also Elisa Corporation established a newly profiled subsidiary offering the same services at lower prices to attract new customers. Kolumbus subscriptions were launched in 2004 and newly profiled subscriptions contributed positively to their performance. (11)

Elisa has proceeded well with the technological improvements. In 2003, they introduced a new positioning service based on the GPRS technology. Some applications of it are finding the nearest taxi. Additionally, digital mobile communication services were launched. For example, Elisa and German Planung Transport Verkehr AG introduced the first traffic jam reporting service that is using mobile communication. In Finland, Elisa implemented mobile phone-enabled electronic identification and electronic signing. They have also a project where testing commercial television services on mobile devices for developing a mobile TV. In 2004, Elisa opened its 3G network for its business customers through co-operation with Saunalahti. (10, 11)

In 2003, Elisa's mobile contact centre was elected as the best one in Finland. The presented arguments were high customer satisfaction with reasonable costs. Opportunities for career advancement were great. The technology was exploited in order to give best service to the customers. (10)

Like TeliaSonera, Elisa also introduced the MMS services. Single-rate mobile subscriptions were launched. They formed a single sales unit for managing better the largest mobile and fixed network customers. (10)

On the Internet customer markets (broadband), Elisa maintained its market share in 30 %. In 2003, tough competition and price war influenced on marketing actions. They also started sales activities in new selected geographical areas. (10)

In Elisa Corporation, there is a separate Elisa Research unit in which they invested EUR 24 million (1,6% of revenues) in 2003. There they conducted a research in IP technologies, wireless equipment, customer-centered (ambient intelligence) approach how to use more extensively information technology. They also introduced a technical strategy for the fixed and mobile networks in order to guarantee higher service level. (10)

They also run specific development programmes in human resource management. The areas covered contain managerial knowledge training and customer-oriented projects through lectures, workshops and presentations. Surveys were made where the feedback was gathered in order to assess the internal training needs. (10)

#### 4.3.2.3 Corporate governance

Elisa Corporation operates in the framework of Finnish law and its own Articles of Association.

There are six members in the Board of Directors (CEO not included). They also have an Executive Board (eight members) (CEO included). Executive Board receives reports from the intra-group management groups. (10)

In 2004, the total number of shares was 141,989,109. Board of Directors will decide whether to increase the share capital by 20 % shortly. The biggest shareholders are private households, nominee registered, public sector entities, finance and insurance companies and private companies. (11)

The Annual General Meeting is the body of decision-making. In the meeting, the attendees may express their opinion and make the decision upon financial documentation and amount of dividends paid. They also nominate the Board of Directors and auditors. Furthermore, they also assess whether to discharge the CEO and members of the Board of Directors from liability. (10)

The Board of Directors has a responsibility for nominating a chairperson and the CEO. They also see that Elisa Corporation's operation is running as expected. They make decisions that also refer to the operation of their interest groups so their aim is to achieve thorough value-added decisions. Their role in the internal value discussion is remarkable. They also plan the core strategy and targeting and prepare proposals for the Annual General Meeting. They also finalise the financial and operation plans, for example, financial policy, large investments or new market entry with proper corporation risk analyses. (10)

The Board of Directors may also establish committees. In 2003, they had a Committee for Remuneration and Evaluation and Appointments. Secondly, they had then a Committee for Auditing. The committees usually consist of three to five members in order to guarantee a clear task breakdown structure and efficient operation. (10)

The CEO implements the every day administration. He is working under the subordination of the Board of Directors and the Companies Act. In Elisa Corporation, there is also an Executive Board which administrates the upper-scale decisions above the Board of Directors. They prepare a corporate strategy and they also develop measures of performance and handle substantial financial affairs. (10)

In Elisa, good corporate ethics are followed. They publish annual report and three interim reports where they inform the investors and other interest groups about current affairs and development. (10, 11)

During 2003, Elisa's credit ratings were lowered several times. However, their financial position improved. Furthermore, there are on-going disputes handled by the Finnish Communications Regulatory Authority and Finnish Competition Authority concerning the pricing and services of Elisa Corporation. Interestingly, Elisa and TeliaSonera had disagreement over the interpretations of the service provider contracts. Some of these disputes are caused due to the inadequate Finnish legislation framework concerning the competition and telecommunications. The legislative framework is under improvements. (10, 11)

#### 4.3.2.4 Outlook & Conclusions

Elisa concentrates on possessing the market position as it is now. At least competitors are not going to give in, so further challenges are expected. The profitability improvement programme will be continued which has strengthened the profit of Elisa Corporation for 2004 by 70 % compared to the previous year. In 2003, their net loss was €16,5 million but in 2004 their net profit reached respectively €106,6 million. Their customer base has developed favourably. (10, 11)

During 2004, they unified the Elisa Corporation's previous subsidiary structure as being operated under the Elisa brand. This action was welcomed by Elisa's customers through easier service structure and for the corporation itself through a simpler structure and better profitability. The renewed organisational structure and technological strengths will give to Elisa competitive edge to maintain or improve its position. (11)

#### 4.3.2.5 Key success factors

- fast
- secure
- efficient
- high-quality
- strong market position
- professional personnel
- user-friendly

Average usage of mobile network 2004

156 minutes/month/customer  
 34 messages sent/month/customer  
 However, average revenue per subscription (ARPU) decreased due to the lower pricing and sales campaigns. (11)

### 4.3.3 Finnet Group

#### 4.3.3.1 Introduction

Finnet is a company providing data communications services. The main offering includes local and national voice call, data and digital television services Finland as a main market area. The main segments are consumer services, business services and operator services. It is one of the oldest data communication providers in Finland. Finnet Group comprehends 37 locally operating telephone companies, Finnet Ltd and Finnet Association. In 2004, the total net sales reached EUR 982 million and the operating profit being EUR 54 million. The total number of employees is some 4,600. (14, 15)

During the past years, there has been a remarkable increase in mobile communication, data transfer and Internet services. During the 1990's, Finnet introduced its services for long-distance and international calls for fixed subscriptions in order to compete against TeliaSonera's market leader actions. The consumers were glad to realise lower prices at telephone calls. In 2001, Finnet entered in the mobile communication markets that naturally lowered the prices and diversified service range. (14)

"The mission of Finnet Ltd is to offer its customers a domestic alternative in voice call, data and mobile services that is reliable and close at hand. Simultaneously, Finnet Ltd provides added value in terms of well-being and economic benefits to its owners and network of partners."  
 (14 Finnet Annual Report 2003)

"Our vision is to be a reliable administrator of the information society."  
 (14 Finnet Annual Report 2003)

Finnet Ltd is the parent company of the group managing its subsidiaries, supervised by Managing Director Mr Matti Makkonen. In March 2003, they rationalised their business



structure from seven separate business companies to a subsidiary-based model to achieve better business management and more efficient operations. (14)

The following structure was completed: DNA Finland Ltd is a national service operator offering package or tailored telecom solutions to consumers and business sector. In December 2004, the total number of the DNA subscriptions was 683,000. (14, 15)

DNA Plus Ltd is a multiple sales channel store chain based on franchising. The number of shops is some 50 selling Finnet Group's mobile, data and digital television services with mobile and information technology devices. Finnet Networks Ltd runs network operator services for mobile, fixed long-distance and broadband communication of Finnet Group as well as for smaller service operators such as PGFree. (14)

Finnet Com Ltd administrates voice call, data, telephone systems and mobile services. Especially, increase in the international calls affected positively this sector as being now the third biggest international call operator in Finland with market share of 8 % for 2003. (14)

Suomen 3KTV Ltd offers digital television and cable television services through local telephone companies amounting to 295,000 households in 2003. Finnet Logistics Ltd administrates the purchasing activities of the whole group. (14)

Because there has been an on-going integration and rationalisation of the company structure, Finnet Group has introduced a separate strategy for employees. Strategy is needed in order to encourage the development of know-how, result seeking, career advancement, working capacity and general working conditions. Furthermore, shared goals and result seeking have a clear connection starting from the daily activities. Advancement of establishing a direct dialogue between management and employees has proceeded. (14, 15)

They also started the evaluation of the payroll system. System with more incentives and motivation is on target. However, the management level has to continue the communication of corporate values. The whole process is observed through feedback gathering and employee satisfaction surveys. At Finnet's side one of the aims is to guarantee the competitiveness as an employer. (14, 15)

#### 4.3.3.2 Finnet mobile sector – DNA Finland

DNA Finland Ltd produces highly developed mobile and Internet services. These services are marketed under the DNA brand that is nationally used. DNA operates in its own GSM/GPRS network owned by Finnet Networks Ltd. It is the third biggest mobile operator in Finland with the market share of 16 % for 2003. In December 2004, they had 683,000 GSM customers. DNA GSM network reaches 99 % of the Finnish population. DNA subscriptions can be used in more than 80 countries due to the co-operation agreements. Finnet holds the 3G licence. (14, 15)

In 2003, due to the merger of TeliaSonera, Finnet got an opportunity to buy Telia's Finnish mobile operations which TeliaSonera wanted to divest. Based on this acquisition Finnet got some 300,000 new customers while capturing the position of market leader in prepaid subscriptions totalling to 135,000 pre-pays. (14)

Due to substantial growth in the number of mobile phone customers, they encountered problems with the customer care activities. They had to change the system of invoicing that caused delays and confusion and chaos was ready to begin. During 2004, the quality improvement of the customer care was a main goal. (14, 15)

#### 4.3.3.3 Corporate governance

Finnet Group's headquarters is in Helsinki, Finland. Therefore, the Finnish Law, Finnish Companies' Act and its own Articles of Association will be followed. (14)

The Board of Directors contains nine members. Under Board of Directors there is a Supervisory Board containing 33 members. Board of Directors met 17 times and Supervisory Board twice during 2003. (14)

The number of shares of Finnet Ltd (parent company) was as follows in December 2003: A shares 198,237, K shares 2,962,697. So-called A share gives a right of one vote per share. K Share entitles to 20 votes per share. (14)

Finnet Ltd is owned by 34 possessors. These are local telephone companies around Finland. The biggest shareholders are local telephone companies such as Oulu Telephone Plc, Lahti Telephone Ltd, Turku Telephone Plc, Kuopio Telephone Plc

and Seinäjoki Telephone Plc. Most of the owner companies are Plc-based but especially, smaller local companies are telephone co-operatives. (14)

As TeliaSonera and Elisa Corporation have had some legislative disputes in 2003, Finnet Group has not had any. (14)

#### 4.3.3.4 Outlook

Competition has become more intense due to the new operators in the market. Several campaigns were launched during the year. However, some customers ran only after these campaigns and in case of Finnet there was a decline in the customer turnover in mobile communications. (14, 15)

However, the future looks good. There is still a potential growth opportunity and Finnet manages to retain the existing customers due to the improvements in the customer care and other services. Sectors expected to grow are broadband and digital television services. Mobile sector is expected to remain at a similar level even though advanced additional mobile data services will be launched. (14, 15)

#### 4.3.3.5 Conclusions

After streamlining the operations, Finnet Group's entire financial result is not encouraging yet. However, the liquidity is solid. It is worth remembering that Finnet Group's process of integrating the functions continues still in 2004 and 2005. Their aim as a group is to reach a position of the third-strongest full-service operator in Finland.

Possible challenges concern joint production processes, services for businesses and quality of consumer services. Finnet will increase the competitiveness of the network and services provided, will provide more consistent customer care and improve the quality standards. These actions need to take place if they want to proceed according to their future wishes but based on investments in product development they will reach the goals. In 2005, they expect an increase in net sales and profitability.

#### 4.3.3.6 Key success factors

- serving customers locally

- networking
- financially solid
- traditionally good customer base
- easy-to-use services
- customer orientation
- focused product development

### 4.3.4 Saunalahti Group

#### 4.3.4.1 Introduction

Saunalahti Group is an Internet and Teleoperator. Saunalahti provides Internet telecommunications and GSM services for private consumers and companies. They also provide domain and hosting services. Saunalahti Group is divided into following sections: 1) Eunet Finland offering Internet subscriptions, data security solutions, hosting, private network, GSM and voice services to medium-sized and large corporate customers and 2) teleoperator business offering GSM services for mobile phones and other market services branded nationally as Saunalahti to private customers. (32, 33)

Jippii Mobile Entertainment has previously belonged to the Saunalahti Group but this section was divested in 2004. This section's main focus was placed on offering mobile entertainment applications and an online gaming portal through Jippii Club. This Club operated in 19 countries and its operation e.g. in Europe looked promising. In the club, ring tones, logos, background images, games and other mobile services such as MMS messages (multimedia messages) and polyphonic ring tones were found. Saunalahti wanted to divest this section to be able to concentrate better on the core functions. (33)

The CEO of Saunalahti Group is Mr Matti Vikkula. The turnover in 2003 was EUR 74.8 million with operating profit of EUR 6.9 million. In 2004, their turnover was even €160,9 million reaching an operating profit of €10,0 million. The net profit in 2003 was €5,0 million and in 2004 €19,0 million. (32, 33)

The total number of employees in 2004 was some 264. The share of Saunalahti Group can be found from Helsinki Stock Exchange. Their guiding values are cost-effectiveness and effi-

ciency. Their aim is to offer price-quality ratio appreciated by their customers. The main distribution channel is Internet supported by telephone customer care and retailer network. (32, 33)

In 2004, in Internet operator services, Saunalahti managed to triple their customer base for broadband customers amounting to 28,083. There was a decrease in the number of modem connections and now the emphasis is placed on marketing of fixed Internet subscriptions. A new segment emerged from residential property broadband solutions. In Helsinki and Turku they already established their own ADSL Network in 2003. (32, 33)

Saunalahti offers also telecom services of international calls and domestic long-distance calls. In 2003, there was more than 50 % increase in the use of these services. As far as domain and hosting services are concerned, Saunalahti is the biggest in Finland. They are responsible for configuring more than 12,000 domestic domains. (32)

At the end of 2002, Saunalahti Group finalised the incorporation of four Finnish subsidiaries and 11 foreign companies through mergers, liquidations or share deals to build its main sections described earlier. The streamlining was done successfully. There was an increase in the operating efficiency due to the rationalisation, simplified structure and strong growth. As a result, the profitability showed positive development in the business units of Saunalahti Group.

There is also an on-going process of realignment that brings more transparency and clarity. (32, 33)

#### 4.3.4.2 Mobile sector of Saunalahti

Saunalahti brand was unified and launched in 2003. This was done because of the introduction of mobile number portability that could be exploited thoroughly through unified marketing actions. (32)

They exceeded the expectations of the growth of mobile communications sector. In 2003, their customer base increased strongly by 115,000 during the year amounting to the final number of customers of 144,000. Around 80 % of the new customers switched to Saunalahti during the latter part of 2003. In 2004, they increased their customer base by 280,000 amounting respectively to 419,351 subscriptions. Their market share is around 9 %. Saunalahti leases the GSM network capacity from TeliaSonera. (32, 33)

In 2004, they implemented a change in the operational model from a service operator to Mobile Virtual Network Operator. In practice, further cost-savings are being reached. From the customers' point of view, for some subscription types they can choose whether to use Sonera's GSM Network or recently launched contract-based use of GSM network owned by Elisa Communications. (33)

Actually, Saunalahti was not very well-known among the consumers in the beginning of 2003. Therefore, they ran extensive marketing actions in order to gain their visibility and to gain brand awareness. In addition to the increased marketing, they also launched new types of mobile subscriptions, for instance, a flat-rate subscription. (32, 33)

Even though the main distribution channel is Internet, in 2003 there was a growth in the products sold through retailers. Now, around 10 % of sales come from retailers which can sell Internet subscriptions (mainly ADSLs) and GSM services. (32)

#### 4.3.4.3 Corporate governance

Saunalahti Group's headquarters is in Helsinki, Finland, so the Finnish Law and Finnish Companies Act will be followed. Additionally, Articles of Association do exist. (32)

The most important decision-making bodies are the Annual General Meeting and Board of Directors as well as actions taken by CEO. Saunalahti has guaranteed to follow good corporate ethics based on guidelines on the administration of public listed companies and insider regulations. (32)

The Board of Directors may have at least three and at maximum eight members. These members are elected at the Annual General Meeting. In 2003, Board of Directors did not establish any committees. (32)

Members of the Board and CEO do have a right to own group's shares who owned in 2003 around 14 % of company's shares. Saunalahti runs share option programmes separately for personnel, management and partners. (32)

In December 2004, the total number of Saunalahti Group's shares was 134,736,488 owned by 20,910 shareholders. The biggest shareholder groups in 2003 were private companies (40.6%), households (22.8%), foreign owners (21.9%), finan-

cial and insurance institutions (14%), non-profit institutions (0.47%) and public sector entities (0.08%). (32, 33)

#### 4.3.4.4 Outlook

Saunalahti expects competitive environment to be as lively as it has been during the past years. Especially, the GSM market is characterised by tough competition. Still they believe in growth of the mobile sector. Likewise, Internet services, especially ADSL or broadband customer base is expected to increase. They expect their turnover to grow by 50 % during 2005. (32, 33)

There was an increase in the use of the WAP services in 2004. This growth is expected to continue. At the same time the colour screens and GPRS-enabled devices become more popular which was essential in order to run the introduction of these new services. (32, 33)

From the mobile sector's point of view, year 2004 was a further period of expanded polyphonic ring tones. In the market, there are now plenty of devices to run background images, animations and logos that create the prerequisite for the use of these services. Mobile Java applications will be increasing that enable downloading of games and other applications. Real audio, video content and GPRS technologies with Java on mobile phones will be further exploited. Wireless solutions will be the key word. (32, 33)

Their long-term objective of Saunalahti Group (set in 2003) was to gain a market share covering at least from five to ten % of the selected markets. They estimated that the growth might even exceed the general market conditions. In the mobile sector, their aim was to exceed the target of having more than 300,000 GSM subscriptions in total. Now we can realise that these objectives have been fulfilled and their operation looks highly promising. Based on the potential growth of customer base, the turnover is expected to develop favourably and for 2005 their aim is to gain a market share from 10 to 20 % in the core sectors. (32, 33)

#### 4.3.4.5 Conclusions

Saunalahti strengthened its competitive position during the year. Especially, they expect a growth in the number of corporate customers. Generally, a multi-brand strategy is followed

that gives them more flexibility and more possibilities to be innovative. They estimate that the development of the turnover and segments will be favourable in 2005.

In 2003, they improved the customer care activities by increasing the number of customer care agents in order to guarantee an adequate level of service. Strong growth in the number of customers was a positive event in 2003 and 2004 whose speed was a surprise also to the management level. The GSM operations' importance has grown significantly.

Due to the streamlining, Saunalahti is now in a phase moving from growth to long-term profitability. This is absolutely well-done from smaller service provider which is competing against larger competitors.

#### 4.3.4.6 Key success factors

- cost-effectiveness
- efficiency
- good price-quality ratio
- expertise
- uncompromising quality standards

### 4.3.5 Cubio Communications

#### 4.3.5.1 Introduction

Cubio Communications Ltd is an international voice and IP operator whose main market area is Finland. They started the operations from providing reasonably priced international call services nationally. The next step was launching of the GSM subscriptions. Cubio offers domestic long-distance call, transit carrier services and voice, Internet and data services as well. Their customer base has been divided into private and corporate customers. (7)

Cubio Communications is wholly owned by a telecommunications investment company Complus Holding SA located in Luxembourg. Cubio's turnover in 2003 was some €18 million and they employed then some 30 employees. Cubio did not want to disclose any exact information on the customer segments in



numbers but they stated having thousands of corporate customers and tens of thousands of private consumers. Their market share in the international calls is some 10 %. Interestingly, Elisa Communications produces all the GSM services to Cubio. (7)

In the transit carrier section they state being among market leaders in Finland. Their transit network covers the area from London to Vladivostok and from Tallinn to Murmansk attached by an international gateway. They have operational units in Sweden, Lithuania and Russia. (7)

Their mission is

“to be a connecting link between the West and East in the North Europe and even considering the global perspective”.

(7 Cubio Communications)

#### 4.3.5.2 The GSM operations

Cubio is a virtual teleoperator. The GSM subscriptions have been priced as packages including a certain amount of minutes, SMSs, MMSs and data transfer services at a certain fixed price. However, the calls and messages exceeding the set limit will be additionally charged.

Cubio was the first operator in launching subscription packages in Finland.

Cubio leases Elisa Communications' GSM network. (7)

#### 4.3.5.3 The CDMA Network

Besides offering the first package-based GSM subscription models, Cubio hopes to get an exclusive right to design and launch a highly modern CDMA network. Cubio got a right to test the CDMA network under the

control of the Finnish Communications Regulatory Authority who will give a licence of running the CDMA network to the most suitable operator. (7)

At present, one-third of the world's networks can exploit the CDMA protocol but its exploitation will be further tested. Cubio will test integration of the network and equipment with a reporting obligation. In Finland, this network might operate at the same frequency as the NMT 450 network, that was abolished in 2002. According to the recent plans, the network shall be available by 2008, however, covering already Helsinki area by 2006. (7)

The establishment of the CDMA network does not mean that the number of base stations will grow since this technology requires only one-eighth of the base stations required to the GSM or the UMTS network and the exploitation of already existing base stations can be implemented. The CDMA enables core mobile phone services, extensive additional services and transcendent data transfer services compared to the GSM network. (7)

The speed of a data transfer in the UMTS network is at maximum 2 megabytes per second, in the GSM network the speed is only a fraction of it, but in the CDMA network it can be increased to 4 megabytes per second. This new technology will surely boost the introduction and launch of mobile video-calls and other technologically advanced content services. (7)

#### 4.3.5.4 Outlook & Conclusions

Cubio is a company having an important role as an international player. In Finland, they rely on the packaged subscriptions directed especially to the young customers. As a small operator, they believe in their capability of being a flexible and dynamic player in the field due to their simple structure.

If Cubio does not get a licence to run the CDMA network, it would be a huge drawback to them. They have already invested in that network and feel confident of their success. If they do not get that licence, they should carefully reassess their operational model and future plans.

#### 4.3.5.5 Key success factors

- attractive subscriptions
- technologically advanced
- small but efficient
- high-quality customer care
- outsourcing

### 4.3.6 ACN Mobile

#### 4.3.6.1 Introduction

ACN Mobile was the first in exploiting the idea of direct selling of fixed and mobile telecommunications services in the selected markets. They also produce Internet services. In the selected countries they provide gas and electricity supply as well. They serve millions of private consumers and small corporate customers. Their main market areas are Europe, North America and Asia Pacific reaching an estimated turnover of \$0.5 billion for 2004. (2)

The distribution of the ACN services takes place through independent representatives operating over 18 countries. The marketing is done globally with a local adaptation varying from country to country. They operate in Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland (only fixed line services), United Kingdom and United States. (2)

#### 4.3.6.2 ACN Communications Finland

ACN Communications Finland Oy as ACN Inc's subsidiary ran ACN Mobile's domestic mobile operations through leasing TeliaSonera's GSM network. However, ACN withdrew from the Finnish mobile cluster on January 31, 2005. All ACN subscriptions were relocated as operating under Tele Finland operator that is a subsidiary of TeliaSonera. For customers, the transition from the ACN to Tele Finland subscription had been made as easy as possible. Their telephone numbers were unchanged or there was no need to change or update the SIM-card. (1)

ACN's success in Finland started from their aggressive market entry and from a fresh idea to start selling subscriptions through network marketing in 2003. They launched campaigns where the calls from an ACN subscription to any other domestic ACN subscriptions were free of charge. ACN Friends subscription gained popularity and in 2004 they had some 250,000 domestic customers. (1, 8)

ACN encountered challenges throughout their way in Finland. Due to offering free calls within the ACN domestic network they could not manage the rapidly growing customer inflow. They had huge problems with the billing management and customer care activities. The Finnish Communications Regulatory Authority imposed sanctions to ACN due to the mismanaged subscriptions. The Authority assessed as well that ACN had no sufficient knowledge over the Finnish legislative framework and had difficulties due to that as well. Finally, the changes in the Finnish competitive environment forced ACN to reconsider their strategy. (1, 8, 47)

#### 4.3.6.3 Conclusions

ACN Mobile's success story begun well two years back but the strict competitive environment and insufficient knowledge over the Finnish legislation forced them to withdraw. During their success, however, there were major challenges with the mismanaged customer inflow and billing. I see their decision of withdrawing as a straightforward even though it was not an easy decision.

#### 4.3.6.4 Key success factors

- network marketing
- outsourcing
- attractive subscriptions
- achieving economies of scale
- strong international presence

### 4.3.7 Globetel

#### 4.3.7.1 Introduction

Globetel is a family-owned private virtual teleoperator offering GSM services, domestic distance call services and international call services. They started their operation in 1997 from the international call services through an aggressive pricing strategy of offering high-quality but extremely low pricing for the international calls. They state having tens of thousands of customers. Globetel Oy has no connection with the GlobeTel

Communications Corporation operating in the United States. (16)

Their domestic distance call services and international call services operate in a way that requires no registration. Customer has to dial through a certain access code in order to be charged at lower prices. They have developed these services according to the wishes of the customers and an easy access has brought them a solid customer base. (16)

#### 4.3.7.2 GSM services of Globetel

Globetel Oy leases TeliaSonera's GSM network. They are a service operator offering traditional subscriptions where the charging is based on minutes or sent messages. Additionally, they launched package-based subscriptions. (16)

As a small service operator they emphasise the flexibility of their service. Especially, larger operators have had problems in dealing with the expanded customer inflow and customer care activities have suffered due to the higher customer volume than expected. Globetel promises to implement their customer care more quickly and friendly than competitors. (16)

#### 4.3.7.3 Conclusions

Globetel is a small but efficient virtual operator. They rely on their ability to make quicker counter-moves reflecting the changes in the competitive environment. Their proceeding with the domestic distance and international call services has been remarkable but their GSM operations need to be further developed.

As a small operator, the limitations concerning their advancement can be found from the limited financial resources. Any technological advancement or launch of a new service before other competitors requires strong efforts and resources. Globetel does not disclose, whether they possess those resources or not.

#### 4.3.7.4 Key success factors

- flexibility
- internationally involved
- partnerships

- outsourcing
- customer orientation

## 4.3.8 Tele 2

### 4.3.8.1 Introduction

Tele 2 Ab has been founded in 1993. The main market area is Europe. At present, they operate in 23 countries. The customer base comprehends 28 million. Their headquarters is located in Sweden. Tele 2 shares can be found from Stockholm Stock Exchange and is listed at Nasdaq list in New York as well. Their operating revenue in 2004 was SEK 43,033 million. (41)

In Finland, Tele 2 is a service operator offering fixed line services, mobile communications services and Internet solutions. Internet solutions are only offered in the Southern Finland for a selected market area.

Fixed line services include domestic distance call and international call services. Mobile services comprehend telephone cards and chargeable accounts. They serve private and corporate customers and for the domestic distance calls or international calls private customers can choose whether to register their mobile phone or fixed line and get cheaper prices or call instantly with an access code. (41)

### 4.3.8.2 Tele 2 mobile services

The mobile communications solutions through Tele 2 comprehend chargeable prepay cards. Customers can order additional services such as voice mail, the GPRS or automatic charging of the prepay account. Tele 2 states being the only prepay subscription provider in Finland, whose prepay cards are operational abroad as well. Tele 2 leases Elisa Communications' GSM network and they have been in the Finnish market since 2000. Their operational structure is a virtual organisation. They hold the UMTS licence. (41)

The charging of the prepay account takes place through their website and agreements with the selected Internet Banks. Charging by credit card has been enabled as well. Tele 2 offers a possibility to manage the subscription through the Internet through the personal sites. (41)

#### 4.3.8.3 Conclusions

Tele 2 has a full potential to develop their market share in the prepaid subscriptions in Finland. The service structure is simple and their services directed to their customers are appreciated.

The launching of the first internationally operational prepaid cards is a huge competitive advantage.

As an international player Tele 2 has been able to exploit new market areas and gained market share constantly. Their virtual organisation model brings advantages that cannot be reached by other operators having a different operational form.

#### 4.3.8.4 Key success factors

- simplicity
- virtual organisation
- reasonable pricing
- innovative services
- internationally strong

### 4.3.9 Emerging mobile operators

PGFree is a new Nordic mobile service operator. Outside Finland it is known as PGOne offering tele-, network- and data communications services. Their customer base is some 200,000 and their turnover in 2004 was EUR 65 million. In Finland, they have operated since 2003 offering as main products mobile communications subscriptions and services through leasing the Finnet Group's GSM network. An international expansion will take place during the coming years inside Europe. (30)

NetFonet Oy is a Finnish service operator established in 2004. Their operational structure is based on network marketing. They lease TeliaSonera's GSM network and their main products are mobile communications services. They have outsourced everything but the internal development of the company. An international expansion to the other Nordic countries and Baltic region is expected soon. (23)

Spinbox is an expertise organisation facilitating service operators to produce self-branded services. It facilitates the

outsourcing activities of virtual network operators through assisting in the processes, systems and expertise. Go Mobile and MTV3 GSM are their service operators in the field competing with lower pricing and adequate service level.  
(35)

Hesburger is a Finnish fast-food chain. They have introduced their own GSM subscription as well through the co-operation with Saunalahti Group. They compete with lower pricing and with the bonus options attached to the Hesburger Bonus Card. Hesburger GSM leases TeliaSonera's network. (19)



## 4.4 Swiss operators

### 4.4.1 Swisscom Group

#### 4.4.1.1 Introduction

Swisscom's core business areas are mobile, fixed network and data communication services. Main segments are private and business customers Switzerland as main market area. In 2003, its operating income was CHF 4.6 billion with net income of CHF 1.6 billion. For 2004, the figures were not confirmed yet by the closing of this research. They are market leader in Switzerland. The total number of employees in 2003 was 19,207 and in 2004 16,600. Earlier, they had the monopoly over the Swiss telecommunications markets before market liberalisation. (36, 37)

Swisscom Group consists of Infonet Services Corporation, Swisscom Eurospot, Swisscom Broadcast, Enterprise Solutions, Fixnet, Immobilien, Swisscom Systems, Mobile, IT Services, Directories, Billag, Bluewin, Cablex, Infonet Schweiz and SICAP International Switzerland. The parent company is Swisscom AG, which share can be found from SWX Swiss Exchange and in New York Stock Exchange. The CEO of Swisscom AG is Mr Jens Alder. (36)

Swisscom has divested its operations in Liechtenstein and Czech Republic. Swisscom has also completed divesting its German subsidiary Debitel. However, Swisscom Eurospot specialised in delivering of public wireless local area networks (LAN) has been successful even in eight countries. (36, 37)

Swisscom Fixnet maintains the fixed network and Internet infrastructure. In 2003, the customer base of Internet services doubled. Through Bluewin, they lead the market with market share of 49 %. They also lease the network capacity to 32 Internet service providers. Direct customer segments are residential customers, small and medium-sized companies (250,000) and resellers and indirectly private consumers e.g. through service operators. (36, 37)

In 2003, there was a decrease in the number of analog telephone lines amounting to total number of 3.09 million. Due to the decrease, also number of ISDN-based Internet connections

decreased. However, there was a rapid increase in ADSL-based Internet connections amounting to 487,000 in 2003. In 2004, the revenue of this sector increased slightly. (36, 37)

Swisscom Fixnet leases its network to 140 national and 200 international telecom companies. They offer European and Trans-Atlantic wholesale services. (36)

Swisscom Enterprise Solutions provides services of communication infrastructure and extensive communication solutions for businesses. For instance, they have implemented complete service packages for calling centres, which require high-quality telecommunication and Internet solutions. Building of Intranet infrastructure enabling the mobility of employees is now one of the business trends with advanced security of communication. The customer base in 2003 was some 4,000 businesses. (36, 37)

Swisscom Systems offers telecoms solutions. Its main segment is medium-sized and large companies. Through a service organisation they provide also consulting services. Customisation is a key element so they provide everything from design to implementation. In 2003, they had some 100,000 customers. (36, 37)

Swisscom IT services contains planning and maintaining of complex IT systems. In 2003, they introduced the first e-billing services through Conextrade trading platform. An important segment is different banks and providing complete IT infrastructure with upgrading services for them. A new segment is providing data hosting services for health care and public sector. (36, 37)

Swisscom Broadcast is liable for transmitting radio and television signals with main segments covering broadcasting corporations, mobile operators and emergency authorities. Billag AG offers complete billing management services enabling different companies to outsource the billing function. Swisscom Eurospot offers complete wireless local area network solutions in selected European countries with the main segment as hotels, congress centres and airports. Swisscom has a stake of 17.7 % in Infonet Services Corporation that provides communications systems for some 3,000 multinational companies in 180 countries. (36, 37)

In 2003, Swisscom ran a cost-saving programme. They had to reduce the work force by 1,263 persons. The programme was continued in 2004. However, Swisscom provides a social plan for fired employees. The programme facilitates the search for

new career opportunities or granting financial subsidy by receiving full salary for the certain period. Some employees got an opportunity to transfer internally from sector to another. (36, 37)

Swisscom will renew its operational structure in 2005. They will implement a merger between Enterprise Solutions and Swisscom Systems to achieve a clearer and more transparent structure through cost-savings. This sector will be called as Swisscom Solutions. (37)

Swisscom promotes good working conditions. They offer on-the-job training at the beginning of career and further training can be obtained later. The salary system is composed to reward employee's performance based on function, experience and individual objectives reflected to the corporate objectives. Fringe and other benefits are provided to improve the individuals' performance and that way improve the performance of the whole group. Employees can also buy shares through a share programme. (36, 37)

They also serve the employees' interests by running a specialist and contact centre which employees can contact e.g. because of financial or other personal problems. They offer a social plan to employees whose employment contract approaches the end. Pension plans are provided as well.

Swisscom runs also an apprenticeship programme. They have established an integration centre for disabled persons to improve their long-term career opportunities. They conduct employee surveys to proceed according to the wishes of employees. (36, 37)

#### 4.4.1.2 Swisscom Mobile

The GSM network of Swisscom is virtually nationwide. The network allows use of the GSM and GPRS applications attached with broadband technology. They have allocated resources to the development of Public Wireless LAN to enable use of the Internet from the mobile phone. Likewise, introduction of the UMTS services will be done shortly. (36, 37)

In 2003, Swisscom's market share of the mobile subscriptions was around 66 % in Switzerland. Mobile sector is nationally branded as Natel. In 2003, their customer base increased by 191,125 amounting to 3.8 million and in 2004, the customer base is expected to be some 3,95 million. In 2004, the revenue of this sector is expected to increase slightly. (36, 37)

As in Finland, also the Swiss mobile market is about to be saturating soon. However, the potential growth lies behind value-adding services such as data transmission and services provided to corporate customers. Already in 2003, there was a rapid increase in data services. The total number of the SMS messages increased by 11.9 %. (36)

Swisscom has a strategic partnership with Vodafone. They launched the Vodafone Live multimedia portal in November 2003. Vodafone Live is “a colorful interactive multimedia world for mobile telephones, combining games console, camera and photo album, entertainment and information center in a single device.” (Swisscom Annual Report 2003). This service has some 50,000 users.

Vodafone has a 25 % ownership of Swisscom Mobile. Moreover, this division developed favourably in 2004. (36, 37)

Due to attractive product portfolio, Swisscom managed to retain the existing mobile sector customers and increased the customer base for 2003 and 2004. The level of mobile sector’s customer care is also appreciated and the introduction of new services as well. (36, 37)

As far as the figures for 2003 are concerned, out of total number of 3.8 million mobile customers, 1.4 million represent pre-paid subscriptions and 2.4 million post-paid subscriptions. Vodafone Live is available for both segments. In 2003, average monthly revenue per user decreased by 4.7 % to CHF 81.00 due to the price competition and further decrease is expected for 2004 as well. According to the customer satisfaction surveys, their customers are significantly more satisfied with the services than their competitors’ customers. (36, 37)

For corporate customers, Swisscom launched a mobile data communications application called Corporate Office Access. Employees can get an access to their corporate Intranet e.g. to initialise or finalise customer transactions. This application is based on the GPRS exploitation. Newly established Client Management Unit assists corporate customers in finding complete Swisscom Group solutions. (36)

In 2003, there were some 76 Swisscom Shops around Switzerland. Additionally, there were five franchising-based shops, whose number will be increased. They had around five million customers visiting the shops in 2003. Due to the relatively large number of visits and customers hunting for advice, time

for queueing increased and now the aim is to achieve more flexible service level.

Swisscom Fixnet services are distributed through 3,857 specialist outlets. (36, 37)

Swisscom Online Shop has become more popular. Additional online services will be introduced such as e-payment and cost controls. Telephone and e-mail customer care activities have been improved and they handled some seven million (Fixnet) contacts successfully. (36, 37)

#### 4.4.1.3 Corporate governance

Swisscom's headquarters is located in Ittigen, Switzerland. Swisscom follows the Swiss law and company's Articles of Incorporation, (36)

One of the most important values is sustainability to serve stakeholders and other parties involved. Management of corporate capital is important. They have also established targeted sponsorship and support activity contracts. (36)

There are nine members in the Board of Directors. There is also an Executive Board with 12 members. Board of Directors proposed dividend of CHF 13 per share to be paid for 2003. The Board of Directors may contain from seven to nine members and one term lasts two years. The Federal Government can nominate two members. Two employee representatives must be included in the board. Members of Executive Board can participate in the meetings of BOD upon invitation. (36)

Board of Directors can establish committees. In 2003, they had three permanent and two temporary committees. One committee may contain from two to four members. The existing committees were finance, personnel and organisation, audit committee, combined compensation and nomination committee. (36)

They also have a corporate risk management system to improve risk transparency and risk awareness. Competence centre implements the risk management. The internal audit department administrates the internal supervisory and controlling operations. (36)

In 2003, the total number of registered Swisscom shareholders was 73,282. The Swiss Federal Government is the largest shareholder with 62.7 %. Members of the Board of Directors

and Executive Committee are allowed to own Swisscom shares. One registered share responds one vote. (36)

Financial information is made public quarterly. Additionally, analysts' meetings and investor conferences are organised. Communication through press and corporate website is important. Half-year and annual reports are published. (36, 37)

The guiding values of Swisscom Group are reliability, roots, cosmopolitanism and respect. They also run an environmental strategy that reflects the environmental friendliness and ecological thinking. They also co-operate with the manufacturers and suppliers of products or components needed to improve the environmental thinking. Of course, they encourage video conferences and other forms of communication that might reduce the amount of travelling. They follow the principles of sustainability marketing containing ecological, social and economic objectives. (36)

#### 4.4.1.4 Outlook

Swisscom expects a slight economical growth. However, competition will be tough. Mobile sector's revenues will be increasing but fixed network's revenues will suffer a slight decrease.

In 2003, they launched several campaigns in all of the main sectors. (36, 37)

Swisscom believes in rapid development of wireless solutions for Internet and mobile communication. However, wireline communication is expected to increase, especially, supporting exploitation of multimedia and music transmission will be important through the ADSL subscriptions. Likewise, the transmission of voice, television and video services through Internet will be enabled with interactive platforms. (36, 37)

Private customers are expected to search for customisable services according to the personal preferences. Business customers will be concentrating on finding a single supplier of complete service packages. In both segments, the use of the GPRS-based applications is increasing rapidly. However, a key challenge is how to maintain lasting customer loyalty that will be strengthened by support services and improved customer relationship management. (36, 37)

As in Finland, also in Switzerland there are restrictions on the payments of leasing the GSM network for service operators. Of course, service operators will exploit this new opportunity. (36)

#### 4.4.1.5 Conclusions

Swisscom wants to act as a major developer of the Swiss information society. One implication of it is their co-operation with schools in Switzerland, to which they offer free Internet access. They believe in their technological competences and meeting the customers' needs through prosperous research and development activities. Swisscom also possesses the UMTS licence for which commercial services were introduced in 2004.

Swisscom Mobile's market share is expected to be on a similar level in 2005. One of their key aims is to maintain their market leader position. Even though the development of the new services is highly important, the improvements with existing voice and SMS services will not be forgotten.

#### 4.4.1.6 Key success factors

- strong financial position
- networking
- innovative
- high-quality communications services
- high customer satisfaction
- user-friendliness

### 4.4.2 Orange Group

#### 4.4.2.1 Introduction

The Orange Group offers wirefree communications services. More precisely, voice and data communication services are provided.

They operate in selected countries around the globe from which key countries of operating are in Europe. (25, 27)

The Group is organised into three main units:

1) France, 2) United Kingdom and 3) rest of world containing Australia, Botswana, Cameroon, Caribbean, Dominican Repub-

lic, Israel, Ivory Coast, Madagascar, The Netherlands, Romania, Slovakia and Switzerland. Additionally, minority holdings in India, Portugal and Thailand. (24, 25)

The corporate headquarters is located in London, United Kingdom. The Chairman of the Board is Thierry Breton and the CEO is Solomon Trujillo. The main shareholder of Orange SA is France Télécom. (24, 25)

In 2002, the company's total revenue increased by 11 % from the year 2001 to EUR 17,1 billion . In 2002 Orange had in total over 44 million customers. Orange has its biggest customer base in the two European countries France (19.2 million customers in 2002) and United Kingdom (13.3 million customers in 2002). Orange Group employed in 2002 altogether 30,876 employees. (24, 25, 27)

In 2002, they ran programmes to achieve better cost controls and improved efficiency. They selected three main areas of improvements that are mass marketing of products and services, business services and technical development. They also revised their corporate structure and divested operations e.g. in Sweden and these actions contributed positively to their performance. (24, 25, 27)

The mission of the company is: "Orange has a positive belief in the future. Orange makes a difference in the people's lives by creating simple and innovative services that help people to communicate better." (26 CSR report 2002)

The Orange brand values according to the company are:

- Dynamic
- Straightforward
- Refreshing
- Honest
- Friendly (25, 26)

The company follows a programme called CSR (Corporate Social Responsibility). The programme runs initially through 3 pilot countries: United Kingdom, France and Switzerland. The CSR report does not portrait the company's financial or commercial performance. Its aim is to show where the company stands in the above-mentioned five categories. (26)

The CSR International Steering Group was created in 2001 to guide the development and implementation of the strategy and approve the Group's CSR programme. It is chaired by the Di-



rector of Corporate Affairs and sponsored by the Executive Vice President for People and Communications. (26)

The CSR Group gives regular progress updates at CSR International Steering Group meetings at Group level and within Orange companies. Feedback from these meetings is used to strengthen the company's approach, and the meetings are also an opportunity to spread awareness about CSR across Orange. The CSR team reports to the Group Director of Corporate Affairs and the Executive Team. They work to refine the Orange CSR management framework, which, over time, will be implemented by all Orange companies. (25, 26)

#### 4.4.2.2 Orange Communications Switzerland

The Orange group operates in Switzerland through its subsidiary Orange Communications SA. Orange came to the Swiss market in June 1999. They market their services to private and business customers. (24, 28, 29)

By the end of year 2003 Orange had 1,085,000 customers in Switzerland and its market share was 18%. In 2004, they had more than 1,137,000 customers. The GSM network reaches 99% of the Swiss population. In March 2003 Orange Switzerland had 1500 part-time and full-time employees. They also had 53 apprentices. (24, 28, 29)

In Switzerland Orange has its headquarters in Lausanne. It also has branch offices in Biel, Bussigny, Lugano and Zurich. Since October 1998 the CEO of the company has been Andreas S. Wetter. Orange Switzerland's total revenue grew from 2003 to 2004 by 10.2 %. In Swiss francs that means from CHF 1,169 million in 2003 to CHF1,288 million in 2004. (24, 28)

Orange Switzerland's services are mainly distributed through 39 Orange Centres. Additionally, they also have some 73 Orange points of sale and even some 4,000 points through partner agreements to ensure the full availability of the services. (24)

They also run an environmental policy. The location of base stations is done in a way that minimises the possible inconvenience. Orange also investigates issues related to the electromagnetic radiation caused by the base stations or mobile communication. The environmental policy also regulates the company's internal activities, such as amount of office waste, transportation or power consumption. (24, 25, 26)

Orange Communications SA introduced its WAP services in June 2000. In August 2000 it launched the Orange Fast Data (HSCSD) and in November 2000 the mobile Internet portal. The company introduced specific tariffs for high-volume SMS users in 2001. At that time they also provided the first family tariff plan in Switzerland. Recently, they launched package-based subscriptions as Cubio did in Finland. (24, 28, 29)

The 15-year UMTS licence Orange Communications SA got in December 2000. That cost the company CHF 55 million. (24)

The Orange company's vision in Switzerland is "that wirefree services will become the preferred personal communications tool for all communication needs." Their mission is "to become the leading provider of high quality wirefree communications services to the people of Switzerland". (29)

Orange Communications SA has built partnerships to cover the following areas: IT and systems integration, software development, Internet Service Providing, development of solutions for telemetry, Enterprise Resource Planning (ERP) and Application Service Providing (ASP). The company also works with a number of different suppliers from a range of product and service categories. (24, 25, 27)

A large proportion of Orange Switzerland's purchasing activities are co-ordinated with France Telecom. This enables the company to reach the economies of scale as well as synergies and better cost control. (24)

#### 4.4.2.3 Outlook

Based on the strong customer base and emphasis on the technological advancement, Orange believes in expanding its customer base. The growing sector is non-voice services. Improved data communications solutions will be provided through the GPRS network or Wireless Local Area Network utilisation and these sectors are supposed to grow prosperously. (24)

#### 4.4.2.4 Conclusions

Due to Orange's role as a strong international telecommunications provider, it has advanced resources to run its existing op-

erations and develop new services and products. Development of Orange's market segments looks promising and they are satisfied with the performance in the Swiss markets.

However, even though Orange does well now, they will not ignore the internal development as a company. They will launch new services and products to be marketed. The competitive pressure in Switzerland will remain high so in order to retain the existing customers and find potential customers they have to continue the efforts to provide high-quality communications solutions.

#### 4.4.2.5 Key success factors

- simple and innovative services
- high-quality
- co-operation
- extensive but customisable service range
- strong international player

### 4.4.3 TDC Group

#### 4.4.3.1 Introduction

TDC Group offers telecommunications solutions. Its headquarters is located in Denmark. Their selected main market areas are in the Northern and Central Europe. The Group is divided into six main units: TDC Solutions, Mobile International, Cable TV, Directories, Services and TDC Switzerland. In 2004, their net revenue was some DKK 43,570 million experiencing an increase by 5,2 % compared to the previous year. Their net income reached DKK 2,411 million reflecting a similar proportion as in 2003. Total number of employees was 20,573 in 2004. The CEO of the TDC Group is Henning Dyremose. (39, 40)

Their international corporate strategy indicates "TDC's strategy is based on our ability to achieve control of the activities in which we invest so that we can strengthen our management influence and create synergies. Furthermore, we want to build on our competencies and experience in developing and operating communications-related

infrastructure. Finally, we want to be in a leading position within the markets we serve.” (39 TDC Annual Report 2003)

Their vision says  
 “to be the best provider of communications solutions in Europe.”  
 (39 TDC Annual Report 2003)

In 2003, they rationalised their operations. They managed to improve the earnings and cash-flows. The growing sectors were mobile communication and broadband solutions. However, they introduced a redundancy programme since 1,558 employees were fired during 2004 due to the rationalisation. (39, 40)

In Denmark, TDC is the market leader in the telecommunications solutions. However, the competition in Denmark is highly intense. Their aim is to develop further web-based self-services. They want to improve their ability of providing integrated and focused solutions. They also want to build better networking possibilities. Main sector of growth is broadband solutions. (39, 40)

TDC Solutions offers landline and Internet services in Denmark. Especially, they have focused on producing broadband services. Other services comprise security and hosting, terminal sales, data communications and line leasing. They market their services only in Denmark. The future will bring the development and introduction of integrated communications products. (39, 40)

TDC Cable TV is responsible for maintaining the cable television network in Denmark. They also maintain access lines that provide infrastructure for broadband Internet connections. TDC Directories offers publishing of printed, electronic and web-based directory services in Denmark, Sweden and Finland. TDC Services produces business services for TDC Denmark-based business lines. (39, 40)

TDC operates in 12 countries in Europe. The total number of customers in 2004 was 13,4 million divided into 3,5 million landline customers, 1,0 million cable-tv customers, 1,8 million Internet customers and 7,1 million mobile customers. Interestingly, some 45 % of the total revenues were gathered from international operations in 2003 and for 2004 the proportion of the international sales was 47 %. (39, 40)

TDC Mobile International offers telecommunications services. They are market leader in Denmark. They also operate in Ger-

many, Lithuania, Poland and Austria. With high-quality services they also rely on establishing partnerships, such as co-operation agreement with Vodafone. As far as their international operation is concerned, their aim is to gain a major decision-making power in the foreign ownerships. (39, 40)

An employee share programme was introduced in 2003 for Danish employees, to reward, generate better motivation and commitment. This programme is available for all domestic employees and some 81 % wanted to take this opportunity. Programme was launched to the fully-owned foreign subsidiaries of TDC as well in 2004. (39, 40)

They emphasise the importance of education, training and competence development through courses organised in-house or externally. Individual advancement in the line with improved corporate performance is on target. Working environment seems to be in a continuous change and supporting employees is a key area. (39, 40)

TDC wants to take care of social responsibility. They run a diversity programme which aims comprise achieving better integration of ethnic minorities and disabled persons in working life. They have also developed the mentoring activities as well due to the changing working environment. (39, 40)

For employees whose contract will be not renewed, TDC runs a redundancy programme which comprises relocation, retraining and recruiting services. The programme is a part of the social responsibility theme. (39, 40)

#### 4.4.3.2 TDC Switzerland

TDC Switzerland is the second biggest telecoms provider in Switzerland. The mobile operations are branded nationally as Sunrise. However, their position in the market has required optimisation of the organisation even though they estimate the competition in the Swiss markets to be not as tough as for example, in Denmark. As they are a full-service provider, TDC offers in Switzerland also landline and Internet services. They employed 2,307 persons in total in 2004. Sunrise's GSM network reaches 98 % of the Swiss population. (39, 40)

Their financial performance has developed positively. Their mobile customer base has increased by 7,4 % totalling to 1,2 million customers in December 2004. However, some changes

took place during the year, since there was a change in the legislation concerning the prepaid subscriptions. All Swiss prepaid subscriptions had to be registered and non-registered customers were eliminated from the customer base. (39, 40)

In 2003, they introduced a combined product portfolio covering mobile, landline and Internet products. The introduction accelerated customers' willingness to buy more products or services from a single supplier. Respectively, they tripled the number of their ADSL customers in 2003.

In 2004, a tough competitive pressure affected strongly to the customers' patterns and a similar success was not repeated. (39, 40)

In 2004, the total customer base of TDC Switzerland consisted of 1,2 million mobile customers, 573,000 landline and 469,000 Internet customers totalling to 2,2 million customers. In addition to the private customers, they also have corporate customers, whose exact number was not disclosed. (39, 40)

There has been going on a rationalisation programme. Former merger of Sunrise and DiAx was finalised. The programme has been introduced to achieve better cost-control and improved efficiency. Now, investment optimisation programme is implemented to avoid any risks or drawbacks. Business processes will be streamlined further. (39, 40)

TDC Switzerland's objective is to launch new services as the first provider in the market. The focus is placed on mobile data services. They also launched Sunrise Live, that is, multifunctional mobile portal containing game world and service portal. Growing sectors now are the MMS messages, camera and visual services and the GPRS services with video-content. TDC Switzerland possesses the UMTS licence. (39, 40)

The main distribution channel is TDC Switzerland shop chain with 34 shops. In 2003, they opened 20 own shops so the advancement with the own distribution channel has been remarkably fast. However, the increasing online shopping and Internet customer care services will change the situation. (39, 40)

#### 4.4.3.3 Corporate governance

Since the headquarters is located in Denmark, the Danish Law and Articles of Association will be followed. TDC Group's share can be found from Copenhagen and New York Stock Ex-

changes. Corporate Governance Rules of the New York Stock Exchange are followed as well. (39)

The Board of Directors contains ten members from which six members are nominated by the annual general meeting and four members nominated by the employees. Additionally, they also have an Executive Committee with three members. Board members do not have a right to receive any stock options. In 2004, the BOD established committees for compensation and auditing. (39, 40)

In 2003, the total number of common shares was 216,459,540. The largest shareholder in TDC Group was SBC Communications with the share of 41.6 % but they sold their TDC shares in 2004. At present, the major shareholders are American, British and Danish institutional investors. They have also plenty of private shareholders all over the globe whose shareholdings were not disclosed. (39, 40)

As far as the corporate communication to investors is concerned, investor meetings do have an important role. In 2003, they had 331 investor or analyst meetings. Annual report with quarterly published financial information is released. (39, 40)

Since TDC Group operates in several countries, they run a risk management programme. They assess financial management and market risks. They also observe the investments in the foreign subsidiaries, partner companies, the development of currency markets, interest rates and market value of financial assets in order to anticipate the future behaviour. Board of Directors participates also in the risk assessment. (39, 40)

TDC Group is attached to some legal disputes. They are not willing to disclose any further information but these cases will be solved through arbitration processes. Legal actions have been taken by TDC against other telecommunications companies. (39, 40)

#### 4.4.3.4 Outlook

There will be a further decrease in the use of landline services. The fastest growing sector in the near future will be broadband services, followed by the growth in the data communication services and mobile services. They also expect that TDC Switzerland's operation will continue as prosperously as it has been now even though the competition will stay strong in all of the markets and price reductions will be expected. They will allo-

cate more resources to the development of business sector services. (40)

Sunrise holds the UMTS licence which will be exploited commercially soon. Additionally, Voice Over IP (Internet telephone calls) were launched in 2005 that is supposed to increase the customer base as well. (40)

#### 4.4.3.5 Conclusions

TDC Group has recognised some challenges that affect their business operations. The whole telecommunications industry develops drastically. The cycle of technological progress has to be efficient but the quality may not suffer. Also, the consumption patterns are still changing, for instance, self-service installation of broadband access or online mobile transactions have become more popular.

Proper development of new services is essential to maintain their strong position. They will follow the market trends and anticipate the future development in order to market their products and services to customers who are interested or whose interest can be raised through not forgetting the existing customers.

#### 4.4.3.6 Key success factors

- partnership agreements
- pro-activeness
- following market trends
- user-friendliness
- high-quality services



## 5. CONSIDERATIONS AND DISCUSSIONS

### 5.1 General

When analysing the performance of the researched mobile operators, every operator has experienced lower returns per customer than before. This is due to lower prices due to intense and constant competitive pressure. Furthermore, there can be seen a clear migration from the existing, more traditional products to the products that can be delivered and managed in the Internet.

The operational environment of the mobile operators changes continuously. They can establish and exploit tools for surviving. Firstly, they can consolidate their markets. Secondly, they might consider expanding their operations internationally. Thirdly, they could renew their operational structure and build newly profiled subsidiaries as TeliaSonera and Elisa Communications have done successfully. Fourthly, overall integration has to be reached through planning an optimised programme to be followed at the process of integration.

The advancement with the technologies in use has been rapid. The portion of fixed line communication has decreased all the time and a demand for the mobile-based communication has increased. This migration has created a base for a shift from circuit-switched to package-switched traffic (VOIP, IP, VPN, GPRS and UMTS).

There has also occurred a transition from consumption-based pricing models to flat-priced subscriptions. After the introduction of the mobile number portability, consumers found it more comfortable to possess a subscription where the prices do not depend on which operator the customer actually calls. The package-based subscriptions, introduced recently, have also gained popularity due to easily manageable pricing.

There has been a huge increase in the self-services and web-based distribution channels. Here, the role of Internet has been a remarkable one. The nature of the customer care activities has also changed from the extensive information delivery through phone to an efficient problem-solving through the e-mail. This has been the direction but on the other hand, a certain portion from the customers wishes to have and appreciate more the production and availability of personalised services through

phone as well. Furthermore, the more self-services will be utilised and marketed, the more the company needs customer care personnel to assist customers in various transactions.

All of the above-mentioned factors show clearly, that the company needs to be able to adapt itself to the changes in the elements of technology and market. Many of the companies have outsourced their activities to be able to concentrate better on the production of the core services and products.

Recently, the launch of the UMTS network has been done in Finland and Switzerland. They had to utilise new base stations to ensure the availability of the services. The UMTS-based services' marketing is now at an early stage. The factors affecting its roll-out are timely availability of commercially viable handsets and the introduction of other technologies such as the WLAN or the CDMA. The mobile operators have an important role of marketing and positioning these new products.

## 5.2 Future and trends

It is essentially crucial for mobile operators to develop the technological capabilities in order to serve customers the way that they appreciate the most. Importance of new innovations is high. Recent introduction of the multimedia services has shown the existing and rapidly growing demand for services demanding technological capabilities also from the mobile devices but equally importantly from the mobile communications companies as well.

The sector of data communication solutions is growing rapidly. Here, the exploitation and use of the GPRS-based services will be increasing. Within a short period, customers can access for instance, video content through mobile phones. Further utilisation of the visual services, such as improving the visual messaging services will take place.

In addition to the technological properties, mobile communications companies' crucial prerequisites are high-quality customer care activities and wide service range with easily understandable implications. The proportion of the use of self-service solutions on the Internet is growing constantly. To mention some examples of these service solutions on the Internet are buying the subscription, acquiring content or additional services and creating a personal profile to exploit the services efficiently.

## 6. FINAL CONCLUSIONS

There can be seen a clear transition process in the mobile communications. First, the liberalisation and privatisation of the markets took place during the past decade. Secondly, a consolidation process is now on-going, that requires optimisation of the resources on the basis of the general conditions in an industry attached with future outlook. In addition to the recent situation, market analysis is an important tool for defining the market potential for new, innovative services. The importance of cooperation and partnerships has grown remarkably and even mergers have taken place.

Sections of mobile communication and Internet solutions in the whole telecommunications cluster belong to the emerging industry environment. These sectors are relatively new and cycle of products and services can be short. However, sector of fixed-voice communication belongs to the industry maturity section due to the emerged substituting products through mobile communication. Fixed-voice solutions will possibly go through a transition to declining industries, if the recent development continues. These changes have affected the operations of the operators.

As this paper shows, competition is generally very tough in the telecommunications cluster both in Finland and in Switzerland. Customers are equally price conscious but are concurrently demanding high-quality services. This is a huge challenge for telecommunications companies because lower prices for same service than before decrease profit margins and can endanger the company's future outlook.

Each of the companies presented have restructured their operational structure or run a rationalisation programme to achieve better cost-controls. Guaranteeing the positive development and continuous growth of the business it is crucial to enable new innovations. To put innovations in to practice, companies must have extensive investment policies to assess the future returns.

The importance of introduction and implementation of new technologies is absolutely high. Popularity of the GPRS services has grown remarkably during the past year. However, the launch of the UMTS network for commercial use will bring new opportunities for companies and customers. For companies, further digitalisation, automation and growth of online services will change the conditions. Customers' desires must be exam-

ined, as now there can be seen a transition to value-added services.

The more advanced technologies will be utilised, the more emphasis will be placed on security maintenance. More complicated systems include a threat of vulnerability. Therefore, I expect a growth in the advanced security services to take place during the coming years.

Recently, the research on possible adverse health effects caused by the electromagnetic radiation generated by mobile base stations and mobile phones has increased. This field is a subject of continuous research and outcomes are expected to be published soon. If the results give any sign of hazards for health it can cause a major threat to the whole mobile communications field. However, already now, there are strict regulations for the radiation in order to guarantee the products' safety.

For companies with international operations, a threat is that not all markets are liberalised yet. This is due to the state-ownership or other political or legal regulations. Development of these factors with overall economic and general condition assessment indicates the rationality of entering to a new market. When streamlining the operations, some of the teleoperators have chosen to divest their international operations due to low returns. Concentrating on the core activities is crucial to guarantee favourable business development.

## REFERENCES

- (1) ACN Inc. Finland  
retrieved March 13, 2005  
[http://www2.acneuro.com/acn/fi\\_en/products/mobile\\_telephony/index.jsp](http://www2.acneuro.com/acn/fi_en/products/mobile_telephony/index.jsp)
  
- (2) ACN Inc.  
retrieved March 13, 2005  
<http://www2.acneuro.com/acn/index.html>
  
- (3) ACN Inc. Switzerland  
retrieved March 13, 2005  
[http://www2.acneuro.com/acn/ch\\_en/products/future/index.jsp](http://www2.acneuro.com/acn/ch_en/products/future/index.jsp)
  
- (4) CIA - The World Factbook -- Finland 2003  
published January 1, 2004  
retrieved January 7, 2005  
<http://www.cia.gov/cia/publications/factbook/geos/fi.html>
  
- (5) CIA - The World Factbook -- Switzerland 2003  
published January 1, 2004  
retrieved January 7, 2005  
<http://www.cia.gov/cia/publications/factbook/geos/sz.html>
  
- (6) COMCOM Jahresbericht - Ausgabe 2003 - Statistische Eckwerte  
Die Eidgenössische Kommunikationskommission (ComCom)  
retrieved January 21, 2005  
[http://www.fedcomcom.ch/comcom/e/rapports/rapport2003/I-4\\_summary.html](http://www.fedcomcom.ch/comcom/e/rapports/rapport2003/I-4_summary.html)
  
- (7) Cubio Communications Ltd,  
retrieved February 13, 2005  
<http://www.cubio.fi>
  
- (8) Digitoday/ACN  
digitoday / tele / Viestintävirasto kovistelee ACN:ää  
published May 4, 2004 by Timo Poropudas  
retrieved March 13, 2005  
[http://www.digitoday.fi/showPage.php?page\\_id=12&news\\_id=30599](http://www.digitoday.fi/showPage.php?page_id=12&news_id=30599)
  
- (9) Dyremose, Henning: Has the telecommunications liberalisation delivered on its promises? (Lecture)  
published May 2002  
Retrieved October 12, 2004, from

[http://www.bakom.ch/imperia/md/content/deutsch/dasamt/komtag/04\\_2\\_5\\_dyremose.pdf](http://www.bakom.ch/imperia/md/content/deutsch/dasamt/komtag/04_2_5_dyremose.pdf)

(10) Elisa Communications annual report 2003,  
published April 2004  
Retrieved October 11, 2004, from  
[http://www.elisa.com/english/docimages/attachment/Elisa\\_03\\_eng\\_sec4.pdf](http://www.elisa.com/english/docimages/attachment/Elisa_03_eng_sec4.pdf)

(11) Elisa Communications Financial Statements 2004,  
published February 2005  
retrieved February 12, 2005  
[http://www.elisa.com/english/docimages/attachment/FINANCIAL\\_STATEMENT\\_2004.pdf](http://www.elisa.com/english/docimages/attachment/FINANCIAL_STATEMENT_2004.pdf)

(12) Espicom - Switzerland Telecoms Market Intelligence Report  
published 11/2004  
retrieved March 20, 2005 from  
[http://www.espicom.com/web3.nsf/structure/tel\\_bksmswitzerland?OpenDocument](http://www.espicom.com/web3.nsf/structure/tel_bksmswitzerland?OpenDocument)

(13) Finland in a changing world economy,  
retrieved February 26, 2005, from  
<http://www.finnfacts.com/english/country/story/worldconomy/historical.html>

(14) Finnet Group Annual Report 2003  
published April 2004  
retrieved October 12, 2004 from  
[http://www.finnet.fi/siirtokuvat/uutiset/finnet\\_vsk\\_2003\\_english.pdf](http://www.finnet.fi/siirtokuvat/uutiset/finnet_vsk_2003_english.pdf)

(15) Finnet-ryhmän tulostiedote vuodelta 2004  
published February 17, 2005  
Published by Finnet Group  
retrieved April 4, 2005 from  
<http://www.finnet.fi/news/>

(16) Globetel Oy  
retrieved March 13, 2005  
<http://www.globetel.fi/index.en.shtml>

(17) GSM World - Glossary of Terms  
retrieved March 13, 2005  
<http://www.gsmworld.com/technology/glossary.shtml>

(18) Haverila, Matti 2002. Marketing in High-tech Industries. Course lecture. Tampere Polytechnic. September 2002.

(19) Hesburger GSM  
retrieved March 13, 2005  
<http://www.hesburger.fi/heseliittyma/>

(20) Kanervisto, Jukka  
MVNO Pricing Structures in Finland  
Ministry of Transport and Communications Finland  
952-201-341-2  
published February 28, 2005  
retrieved March 18, 2005 from  
[http://www.mintc.fi/oliver/upl410-Julkaisuja%2021\\_2005.pdf](http://www.mintc.fi/oliver/upl410-Julkaisuja%2021_2005.pdf)

(21) Kasvio, Antti  
The Telecommunications Infrastructure  
published 2001  
retrieved March 13, 2005 from  
<http://www.info.uta.fi/winsoc/engl/lect/TELECOM.html>

(22) Leppävuori, Ilkka  
ANALYSIS OF THE FINNISH MOBILE CLUSTER  
published May 2002  
Ministry of Transport and Communications Finland  
ISBN 951-723-791-X  
retrieved February 26, 2005 from  
<http://www.mintc.fi/www/sivut/dokumentit/julkaisu/julkaisusarja/2002/a282002.pdf>

(23) NetFonet Oy  
retrieved March 13, 2005  
[http://www.netfonet.net/get.php?page\\_id=21](http://www.netfonet.net/get.php?page_id=21)

(24) Orange 2004  
retrieved February 26, 2005  
<http://www.orange.ch/aboutus>

Orange reports:

<http://www.orange.com/English/investorrelations/annualreportsandr.asp>

(25) --> All About Orange (printed) , retrieved October 12, 2004

(26) --> Orange CSR Report (printed), retrieved October 12, 2004



(27) --> Orange first half results 2003, Management Report, retrieved October 12, 2004

(28) Orange Switzerland, results 2003,  
published March 10, 2004  
Retrieved April 5, 2005, from  
<http://www.orange.ch/press/2004/200405?ts=1086940730631>

(29) Orange Switzerland  
Retrieved October 12, 2004 from  
<http://www.orange.ch/aboutus/corporateaffairs/csr/csrHow?ts=1086355728990>

(30) PGFree  
retrieved March 13, 2005  
[http://www.pgfree.fi/dt\\_article.aspx?m=35](http://www.pgfree.fi/dt_article.aspx?m=35)

(31) Porter, Michael E. 1998. On Competition  
ISBN: 0875847951  
Boston (MA), Harvard Business School Press.

(32) Saunalahti annual report 2003  
published April 2004  
Retrieved October 12, 2004 from  
[http://www.saunalahtigroup.com/annualreport2003/saunalahti\\_eng.pdf](http://www.saunalahtigroup.com/annualreport2003/saunalahti_eng.pdf)

(33) Saunalahti Group's financial statement bulletin 1 Jan.-31 Dec. 2004  
published February 7, 2005  
retrieved February 12, 2005  
<http://www.saunalahtigroup.com/bulletin.php?index=1747>

(34) Snellman, Kalle  
Mobiilipalvelumarkkinat Suomessa 2003  
published April 20, 2004  
Ministry of Transport and Communications Finland  
ISBN 951-723-710-3  
retrieved March 18, 2005 from  
[http://www.mintc.fi/oliver/upl545-24\\_2004.pdf](http://www.mintc.fi/oliver/upl545-24_2004.pdf)

(35) Spinbox  
retrieved March 13, 2005  
<http://www.spinbox.fi/about/index.php>

(36) Swisscom annual report 2003  
published April 2004  
Retrieved October 12, 2004 from

[http://www.swisscom.com/SCMCMS/GB/gb03/gb03\\_en/pdf/SC\\_GB2003\\_e.pdf](http://www.swisscom.com/SCMCMS/GB/gb03/gb03_en/pdf/SC_GB2003_e.pdf)

(37) Swisscom Interim Report Jan-Sep 2004

published January, 2005

retrieved February 26, 2005

[http://www.swisscom.com/NR/rdonlyres/7E536132-F42A-42F4-B9BC-5C4BD05E91A4/0/2004\\_Q3\\_Zwischenbericht\\_en.pdf](http://www.swisscom.com/NR/rdonlyres/7E536132-F42A-42F4-B9BC-5C4BD05E91A4/0/2004_Q3_Zwischenbericht_en.pdf)

(38) Switzerland telecommunications market research, Switzerland telecoms reports, telecom brief

Retrieved October 14, 2004 from

<http://www.totel.com.au/european-telecommunications-research.asp?toc=1503>

(39) TDC annual report 2003

published April 2004

Retrieved October 14, 2004 from

[http://download.tdconline.dk/pub/tdc/english/investor/aarsraporter/aarsrapport2003/annualreport\\_2003\\_UK.pdf](http://download.tdconline.dk/pub/tdc/english/investor/aarsraporter/aarsrapport2003/annualreport_2003_UK.pdf)

(40) TDC Annual Report 2004

published February 2005

retrieved February 27, 2005

[http://download.tdconline.dk/pub/tdc/english/investor/aarsrapporter/aarsrapporter2004/annualreport\\_2004\\_uk.pdf](http://download.tdconline.dk/pub/tdc/english/investor/aarsraporter/aarsrapporter2004/annualreport_2004_uk.pdf)

(41) Tele 2 Full Year Report 2004

published February 16, 2005

retrieved March 13, 2005

<http://wpy.observer.se/wpyfs/00/05/4D/5F/wkr0001.pdf>

(42) TeliaSonera Annual Report 2003

published April 2004

Retrieved October 14, 2004 from

[http://www.teliasonera.com/Koncernwebb/Attachment/20040427/2003\\_AnnualReport\\_En.pdf](http://www.teliasonera.com/Koncernwebb/Attachment/20040427/2003_AnnualReport_En.pdf)

(43) TeliaSonera Press release Feb 11<sup>th</sup> 2005

retrieved February 12, 2005 from

[http://www.teliasonera.com/ts/teliasonera/sidtypTS\\_press.do?tabId=4&channelPage=%2FsidtypTS\\_press.do&channelId=-1073820211](http://www.teliasonera.com/ts/teliasonera/sidtypTS_press.do?tabId=4&channelPage=%2FsidtypTS_press.do&channelId=-1073820211)

(44) TeliaSonera Year-end Report Jan-Dec 2004

published February 2005

retrieved February 12, 2005 from

<http://www.teliasonera.com/Koncernwebb/Attachment/20050211/TeliaSoneraEng.pdf>

(45) Wilson, Richard  
Customer Relationship Capital  
published August, 2001  
published by Manton Group  
retrieved April 3, 2005 from  
[http://www.digital-minds.com/survey/images/Manton\\_Relationship%20Capital%20White%20Paper.pdf](http://www.digital-minds.com/survey/images/Manton_Relationship%20Capital%20White%20Paper.pdf)

(46) Wirzenius, Arno  
Mobile Pricing and Interconnection Regimes  
published May 17, 2004  
published by Ministry of Transport and Communications Finland  
ISBN 951-723-717—0  
retrieved February 26, 2005 from  
[http://www.mintc.fi/oliver/upl686-31\\_2004.pdf](http://www.mintc.fi/oliver/upl686-31_2004.pdf)

(47) YLE/Kuningaskuluttaja/ACN  
Puhelinoperaattori ACN:n nopea nousu Suomessa päätymässä  
published February 3, 2005 by Virpi Väisänen, TV1  
retrieved March 13, 2005  
<http://kuningaskuluttaja.yle.fi/node/139>

## ANNEX 1 Abbreviations

Adapted from (22 Leppävuori: ANALYSIS OF THE FINNISH MOBILE CLUSTER) unless stated otherwise

“3G The third generation of mobile networks, refers usually to UMTS technology.

CDMA Code Division Multiple Access; also known as spread spectrum, CDMA cellular systems utilise a single frequency band for all traffic, differentiating the individual transmissions by assigning them unique codes before transmission. (17)

EDGE Enhanced Data Rate for GSM Evolution. A faster version of GSM that boosts the data transmission speed up to 384 kbits/s with the help of a new modulation scheme.

GPRS General Radio Packet Service. An extension of GSM that allows packet-switched data transmission with speed up 115 kbits/s and always-on connectivity.

GSM Global System for Mobile Communication. A digital mobile telephone system that is used in more than 170 countries and allows data transmission rates up to 14 kbits/s. In Europe, the GSM system operates at the 900 MHz and 1 800 MHz frequency band.

HSCSD High-Speed Circuit Switched Data. An extension of GSM that allows data transmission speed up 58 kbits/s by using several time slots instead of only one time slot.

IP Internet Protocol (17)

MMS Multimedia Messaging Service an evolution of SMS, MMS goes beyond text messaging offering various kinds of multimedia content including images, audio and video clips. (17)

**Mobile Cluster** The fast-growing core of the Finnish telecom cluster that focuses on the mobile side of telecommunications.

**NMT Nordic Mobile Telephone system:** an analogue cellular technology deployed in the Nordic countries in the late 1970's; variations were also deployed in the Benelux countries and in Russia. NMT operated in the 450 and 900MHz bands and was the first technology to offer international roaming, albeit only in the Nordic countries. (17)

**SMS Short Message Service.** A service for sending messages of up to 160 characters to GSM mobile phones.

**VoIP Voice over Internet Protocol** (17)

**VPN Virtual Private Network** (17)

**UMTS Universal Mobile Telecommunications System.** A mobile communication system that supports a wide range of voice, data and multimedia services and allows data transmission speed up to 2 Mbits/s. Compared to GSM, UMTS offers a new air interface operating at around 2 GHz and a packet-based network architecture that supports both voice and data services.

**WAP Wireless Application Protocol.** An open, global protocol specification that empowers mobile users with wireless devices to easily access and interact with information and services.

**WLAN Wireless Local Area Network;** a short range radio network normally deployed in traffic hotspots such as airport lounges, hotels and restaurants. WLAN enables suitably equipped users to access the fixed network wirelessly, providing high speed access (up to 11Mbit/s download) to distant servers.” (17)