

**Charles University in Prague**

Faculty of Social Sciences  
Institute of Economic Studies



BACHELOR THESIS

**Czech Telecommunications Market before  
the Entry of Fourth Player:  
Strategic Analysis**

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## Declaration of Authorship

The author hereby declares that he compiled this thesis independently, using only the listed resources and literature.

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Prague, May 11, 2013

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Signature

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## Abstract

This thesis analyses the Czech telecommunications market before the entry of fourth mobile network operator, an event that is expected to completely alter this market. As the entry of a new MNO is interconnected with the LTE roll-out as the medium of entry, the LTE roll-out forms the underlying basis of the analysis. The entire analysis is elaborated from the strategic perspective Telefónica O2 Czech Republic as the most complex market player and the only fully integrated operator. Due to the strategic perspective, the basic concepts of strategic planning, with stress on the internal/external analysis and strategy formulation, are explained as well in the first part of the thesis.

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## Abstrakt

Tato bakalářská práce analyzuje český telekomunikační trh před vstupem čtvrtého mobilního operátora, událostí, o které se očekává, že kompletně změní tento trh. Vzhledem k tomu, že vstup nového mobilního operátora je nesdílně spojen s uvedením LTE sítě na trh jakožto médiem vstupu, vytváří uvedení na trh implicitní linii celé analýzy. Analýza je provedena ze strategické perspektivy Telefónica O2 Czech Republic jakožto nejkompexnějšího hráče na trhu a jediného plně integrovaného operátora. S ohledem na strategickou perspektivu celé analýzy jsou v první části práce vysvětleny základní koncepty strategického plánování, s důrazem na interní/externí analýzu a formulaci strategie.

<b>Klasifikace</b>	L10, L20, L96
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# Acronyms

<b>ARPU</b>	Average Revenue per Unit
<b>BEREC</b>	the Body of European Regulators for Electronic Communications
<b>CAPEX</b>	Capital Expenditure
<b>CDMA</b>	Code Division Multiple Access
<b>CSI</b>	Customer Satisfaction Index
<b>ČTÚ</b>	Český Telekomunikační Úřad (Czech Telecommunication Office)
<b>EDGE</b>	Enhanced Data for GSM Evolution
<b>FBB</b>	Fixed Broadband
<b>GSM</b>	Global System for Mobile Communication
<b>IPTV</b>	Internet Protocol Television
<b>LTE</b>	Long Term Evolution
<b>MNO</b>	Mobile Network Operator
<b>MVNO</b>	Mobile Virtual Network Operator
<b>OIBDA</b>	Operating Income before Depreciation and Amortization
<b>OPEX</b>	Operational Expenditures
<b>OTT</b>	Over-the-Top
<b>PPFM</b>	PPF Mobile
<b>rDSLAM</b>	Remote Digital Subscriber Line Access Multiplier
<b>STÚ</b>	Telekomunikačný Úrad Slovenskej Republiky (Slovak Telecommunication Office)
<b>TEF</b>	Telefónica
<b>TEFSK</b>	Telefónica Slovakia, s.r.o.
<b>TMCZ</b>	T-Mobile Czech Republic, a.s.
<b>UMTS</b>	Universal Mobile Telecommunications System
<b>VDSL</b>	Very High Speed Digital Subscriber Line
<b>VoLTE</b>	Voice over LTE
<b>VODCZ</b>	Vodafone Czech Republic, a.s.

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**Předběžná náplň práce v anglickém jazyce**

Strategy and the strategic planning are THE words of the business. All successful businessman talk about their company's strategies and where they got them. But what does the term "strategy" really means and what does it incorporates? The goal of this paper is to summarize the main aspects of the strategic planning process – the internal and external analysis, strategy formulation, implementation as well as its evaluation. The focus will be place on the first two stages as they create the core of strategic planning itself. The main tools used such as Porter's Five Forces model, SWOT analysis or the BCG matrix shall be covered and explained as well.

Telecommunication industry has been experiencing enormous changes during last few years and affronts complete reassessment its strategic goals and strategic options and therefore provides with an excellent and interesting option for a case study. Consequently, the application of general theory shall be carried on the example of telecommunication in the Czech Republic as this mature market faces new challenge in form of roll-out of LTE but also the expected entry of the fourth telecom operator.

This paper is written in cooperation with an external consultant from Telefónica O2 Czech Republic.

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# 1 Introduction

A revolution is expected in the Czech telecommunications market with the entry of a fourth mobile network operator (MNO). The fourth MNO should be introduced to the market through the auction of LTE mobile broadband frequencies later in 2013. If so, it will not only influence the mobile market but the other segments, such as fixed broadband. In general, the Czech telecommunication market, and mainly the mobile segment, is considered not competitive enough due to the existence of companies with large market power. Customers not only complain about the pricing but also about the impossibility to orient them in the large number of tariffs, retention tariffs, and other offers.<sup>1</sup> ČTÚ believes that opening the market to a new entrant will revise the entire industry. The option came with the transition of TV transmission to digital form vacating the 800MHz spectrum for the mobile operators.

The objective of this thesis is to provide with an overall summary of the current situation in this industry from the strategic perspective of the incumbent companies with respect to the expected changes in form of new MNO and LTE roll-out, including the precautions being taken at the moment. As most of the strategic tools are aimed at distinguishing the position of a single company or corporation, this thesis focuses on Telefónica Czech Republic, as the largest and the only integrated player on the market, as it provides with a complex picture of the current market.

As to the structure of the thesis, it is divided into two parts – theory survey and a case study. The first part, theory survey, summarizes the theoretical concepts and phases of strategic planning: vision&mission, analytical phase, conceptual phase, implementation phase and evaluation phase. The main stress is put on the analytical and conceptual elements as these build bases for the second part focused on the Czech telecommunications industry. The second part, case study, follows the analytical and conceptual sections of the theory and applies it, including the main models, to the reality of Czech telecommunications industry and Telefónica Czech

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<sup>11</sup> This is not entirely true anymore due to the “hippie revolution” introduced by TEFCZ in April 2013. This issue is covered by one of the later chapters.

Republic. During the business unit level strategy assessment, first the current campaign of Telefónica Czech Republic, so called “Free” tariffs, is explained from the strategic perspective. Next, the LTE roll-out as the medium for the new mobile network operator is analyzed. Last section summarizes the findings of this thesis and offers its possible extensions.

## 2 Introduction to Strategic Planning

*Strategic management can be defined as the art and science of formulating, implementing, and evaluation cross-functional decisions that enable an organization to achieve its objectives.* (David 2011 pp.6)

*Strategy is a system concept which gives coherence and direction to growth of a complex organization.* (Ansoff&McDonnell 1990 pp.45)

During several last decades, all of the industries has been experiencing rapid changes in its every single aspect. The companies had to adjust to a variety of condition ranging from mass production to political environment and peace.

Each industry has followed a different path, however these paths could divided into four main groups (Ansoff&McDonnell 1990 pp.29)

- Those of them were facing the same demand as in the beginning of the century.
- Those of them were facing the same demand as in the second quarter of the century.
- Those of them were facing all of the previous aspects as well as completely new ones.
- Those companies who fulfill unexpected technological needs that previously did not exist.

As a result, for a large group of industries, the traditional operational planning did not suffice. At first, after diverse experiments, many companies then started to practice the long-range planning – *planning the firm's future on the basis of extrapolation of past trends* (Ansoff&McDonnell 1990 pp.247). However, as many soon realized, this approach could be only rightfully applied if there were no disruptions and discontinuity in the industry evolution as many soon realized.

Strategic planning therefore came to resolve two main problems of the management: (Ansoff&McDonnell 1990 pp.30)

1. *Each firm needs to diagnose its unique pattern of future challenges threat, and opportunities.*
2. *Each firm must design and implement its unique responses to these challenges.*

The target of the strategic management is to create a sustainable competitive advantage – *anything that a firm does especially well compared to rival firms* (David 2011 pp.11) - in comparison to operational planning whose goal is the exploitation of the given advantage and immediate success in terms of gains and liquidity.

Strategic planning focuses more on the future and considers the company an element of a complex system instead of exclusively monitoring itself. The strategy creation essentially lies in relating the company to its environment (industry) with respect to its inner structure. It tries to match the possible options with the company's mission, i.e. its philosophy of doing business. The main steps of the strategy creation are:

1. Vision&Mission
2. Analytical Phase
3. Conceptual Phase
4. Implementation Phase
5. Controlling Phase

Some companies can do quite well even without explicit strategy - the companies established in a growing industry with stable environment can manage to stay in business with only operational planning. However, when a change occurs or the industry reaches its saturation point, the companies without a clear strategic vision will experience serious hardship. The benefits of having a strategy seem to more than compensate for the costs of its implementation.

## 2.1 Vision and Mission

Before the process of strategic planning can even start, the company has to clarify and make sure that every stakeholder knows the ultimate goal of the company – where the company is going: what it is and what it wants to become. This is usually done through elaboration of the vision and mission statements.

The vision is *an aspirational description of what an organization would like to achieve or accomplish in the mid-term or long-term future.* (Business Dictionary 2013)

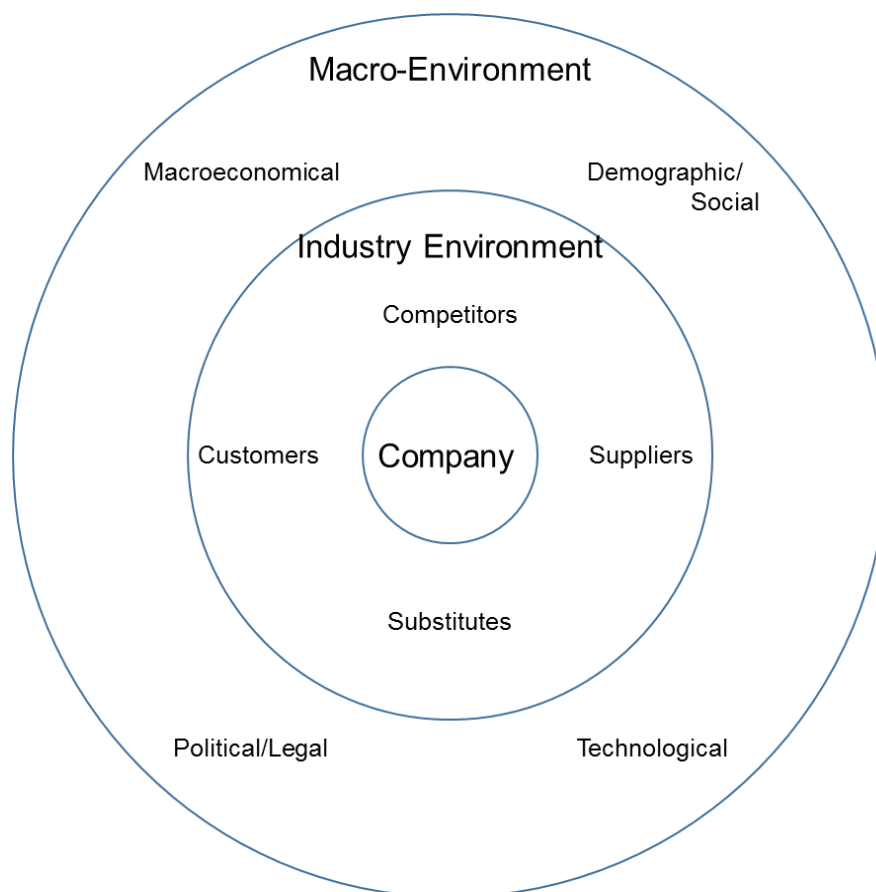
*Mission statements are enduring statements of purpose that distinguish one business from other similar firms. A mission statement identifies the scope of a firm's operations in product and market terms.* (Pearce&David in David 2011, pp.11)

Some differences between these two types of statements are: vision is an answer to what the company wants to become whereas the mission unfolds what the company is at the moment; mission relates to the present but vision talks about the future; the mission might change dramatically but the vision should remain intact as it articulates what the company represents.

## 2.2 Analysis Phase

### 2.2.1 External Analysis

*A company's external environment can be broken down into two parts: the industry environment that the company competes in and the macroenvironment. (Hill&Jones 1989 pp.61)*



**Figure 1: The External Environment**

Source: Hall&Jones 1989, pp.61

#### 2.2.1.1 Macroenvironment

*Macroenvironmental factors are factors external to an industry that influence the level of demand within it, directly affecting company's profits. (Hill&Jones 1989 pp.81)*



### **Macroeconomic Environment**

The best possible strategy of the company does highly depend on the economic condition prevailing in the market. Large investments into production capacity generally do not make sense in the period of economic downfall or in the times of very high interest rates which make their financing much more expensive. If the exchange rates are expected to appreciate, the companies can hardly plan to sell more (other conditions held fixed). Therefore, the companies should pay close attention to the macroeconomic predictions, either the ones issued by central banks or their own ones.

### **Technological Environment**

Technological changes can come unexpectedly or after long anticipation. But in any case, they have large influence over many aspects of company's business. They can create new opportunities by decreasing the cost of production or by introducing spots for brand new products but they can also be destructive – making products obsolete overnight and driving companies out of business rapidly. Accelerating technological evolution also tends to shorten the product life cycle allowing for the introduction of new products by putting pressure on the necessity of constant innovation.

### **Social/Demographic Environment**

Factors as population growth rate, age distribution, average education, family attitudes should be assessed as these trends significantly affect demand as well as they are characteristic for the majority of a workforce in a given market. Cultural aspects and religion should be also taken into account as many others.

### **Political/Legal Environment**

The main consideration here comes to how much the government intervenes in the economy and how stable the conditions in the region are. Stress should be put on the commercial law, antitrust law, discrimination law and other laws highly influencing the business environment such as corporation tax.

## 2.2.1.2 Industry Environment Analysis - Porter's Five Forces

*Strategy should find a position in the industry where the company can best defend itself against these forces or can influence them in its favor.* (Porter 1979 pp.137)

One of the main methods used when assessing the external factors and their strengths is Porter's Five Forces Model. It is an example of Industrial Organization Approach—approach stressing out that *external (industrial) factors are more important than internal factors in a firm achieving competitive advantage* (David 2011 pp.63). Porter argues that competition in a given industry is a result of five underlying forces – threat of entry, powerful suppliers & buyers, substitutability of the products, and the current competitors in the industry (Porter 1979 pp.137). Their aggregate strength determines the level of the competition and therefore the ability of the companies to collect extra-normal profit. The strength of individual forces varies across different industries and should be considered carefully. It is important to emphasize that these forces do fluctuate and change over time and therefore offer new opportunities for companies taking this into account.

### Threat of Entry

New entrants tend to seriously alter the industry structure as they bring new capacity as well as wish to obtain as large market share as possible. They can even endanger the profitability of the entire industry in the process – for example when fighting for the market share through price war.

The two factors to be considered are the barriers to entry and the anticipated reaction of the incumbents. The barriers of entry consist of the economies of scale, brand identification, capital requirements but also government policies (i.e. license requirements or access to raw materials) and others. The reaction of incumbents relates to the retaliation to be expected from the “old” companies and does depend on their resources to fight the intruder, willingness/ability to cut the prices and the stage in the industry life-cycle, the market is currently at. (Porter 1979 pp.138)

### Powerful Suppliers & Buyers

The suppliers and buyers pressure the profitability of the company from two side – powerful buyers push down the prices whereas powerful suppliers drive up the

production costs, both resulting in a drop in the profit margin. The less suppliers there are and the more important role they play in the supply chain of the company and the process of product creation, the stronger power over the company they possess (analogical for the buyers).

### Substitutability of Products

If the products are easily substitutable, then companies are forced to maintain low prices as well as bring innovation in order to keep up with the rest of the market and preserve their market share. The competition in this aspect is also connected to the existence of the switching costs – the cost of switching to a product of a different company. If these are high, then the substitutability of the product do not pose a serious threat as the possibility of changeover is actually limited.

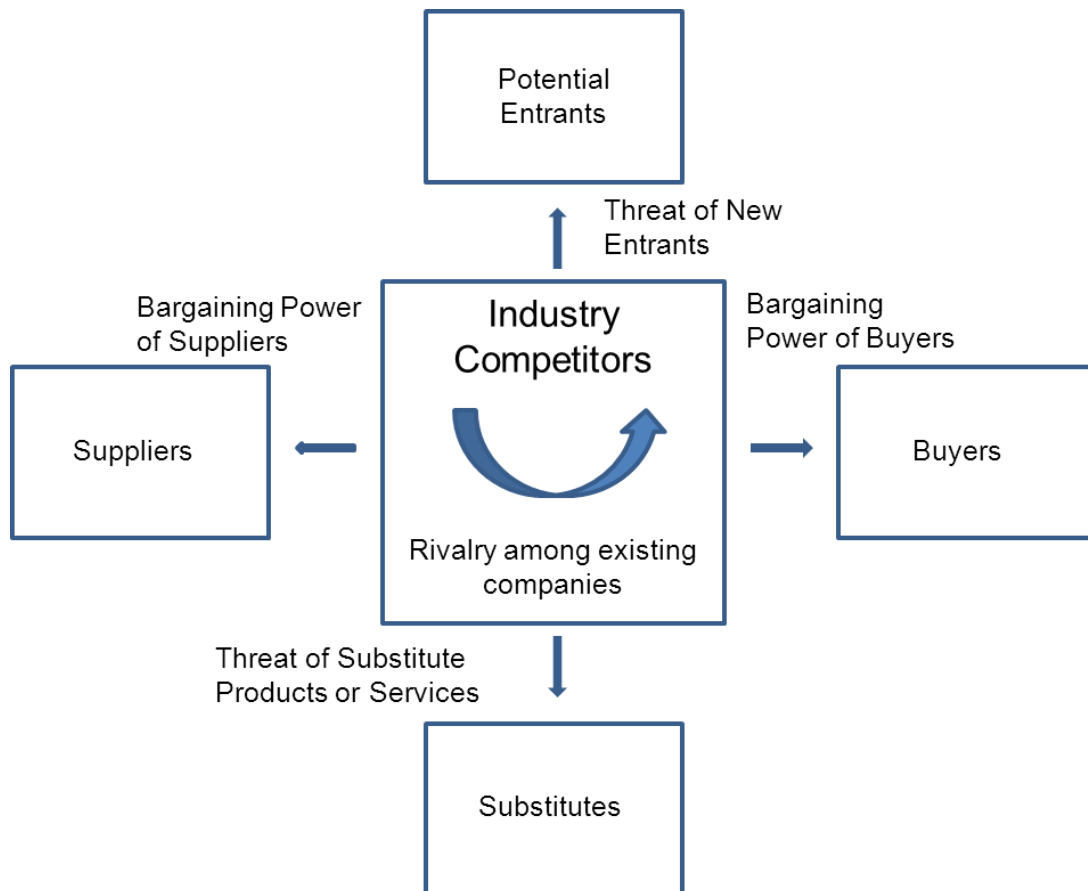
### Current Competitors

The rivalry between incumbent firms relates mainly to three factors: industry competitive structure, demand conditions, and exit barriers.

*Competitive structure refers to the number and size distribution of companies in an industry* (Hill&Jones 1989 pp.66). The rivalry in the fragmented industries, i.e. where the number of companies is large and the size is comparable and no clear market leader is present, tend to be very strong, usually resulting in price wars.

It also depends on which part of the industry life-cycle the market is currently experiencing. With growing demand the company can increase its sales without putting pressure on the market share of other companies and peaceful coexistence is possible. However, in saturated markets or even declining markets, the companies have to fight against each other in order to at least retain their market shares and the rivalry intensifies.

The rivalry also increases if the barriers to exit are high forcing the companies to fight even in situation they would otherwise prefer to exit the market.



**Figure 2: Porter's Five Forces**

Source: adapted from Porter 1979 p.141

## 2.2.2 Internal Factors

*The objective [of an internal analysis] is to identify both the sources of company-level strengths and weaknesses and basic functional strategies* (Hill&Jones 1989 pp.93).

The goal of an internal analysis is to locate the company's weakness, which constitute potential future internal risks, and strengths that could be developed into distinctive competencies, *unique strength that competitors cannot easily match or imitate* (Hill&Jones 1989 pp.91), or even competitive advantage.

One of the basic rules of economy says that profit equals the difference between what company earns for its product and what it costs the company to produce it. Therefore, the only time the company can earn profit, i.e. it has a competitive advantage, is when

either its costs are lower than the rivals' ones or the level of product differentiation justifies premium prices.

Two main approaches towards acquisition of distinctive competition have been identified: the value chain approach, and the resource-based approach.

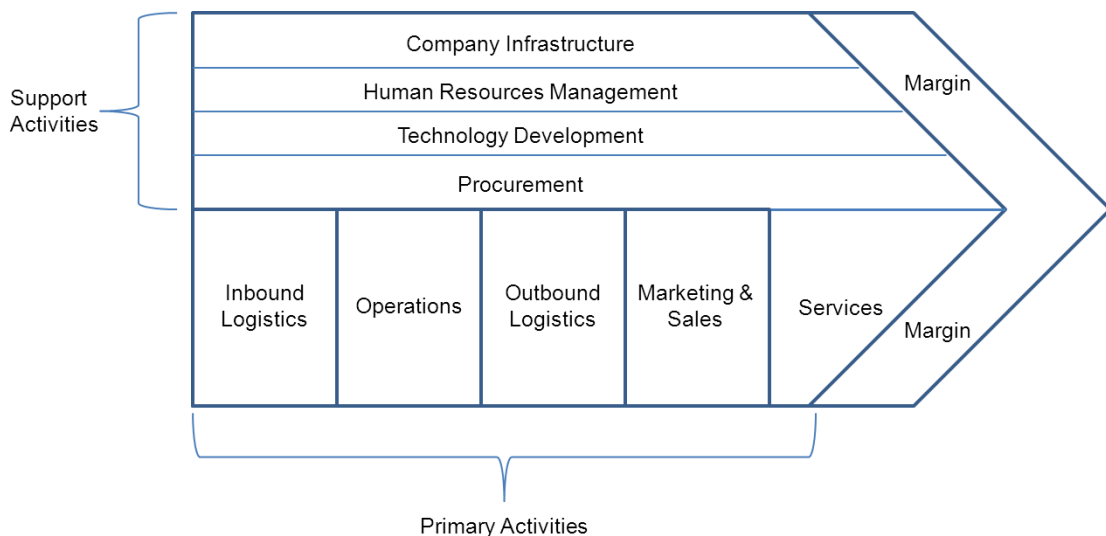
### 2.2.2.1 The Value Chain

*The value chain disaggregates a firm into its strategically relevant activities in order to understand the behavior of costs and the existing and potential sources of differentiation.* (Porter 1989 pp.33)

The point of the value chain analysis is to assess the disaggregated activities in terms of costs and its addition to the product differentiation. This way the company can assess its weak spots as well as its strengths.

The disaggregated activities can be divided into two groups:

- Primary activities – the actual manufacturing of the product as well the its marketing and the delivery to the customers
- Support Activities – all the remaining activities allowing the primary activities to happen



**Figure 3: Generic Value Chain**

Source: Porter 1989 pp.37

The company can have a distinctive competence in either of those two groups of activities. If the company does one of the steps exceptionally well (either by higher differentiation or by the ability to produce with lower costs), it can gain/sustain a distinctive competence, and possibly a competitive advantage, as the exceptionality will lead to lower product costs or an output valued more by customers.

However, any distinctive competence can only be measured by comparison to the other companies present in the market. All of the companies in the same industry segment have similar value chains. Therefore, the value chains can be compared to assess the internal situation with respect to its rivals.

*Benchmarking is an analytical tool used to determine whether a firm's value chain activities are competitive compared to rivals and thus conducive to winning in the marketplace. (David 2011 pp.120)*

Comparing the company's value chain to its competitor can be useful – the “best practices” across the industry can be observed and then duplicated in order to erase the distinctive competencies/competitive advantages of the rival companies and therefore improve the company's market position and own competitive advantage(s).

However, benchmarking can be sometimes very tricky as it can be hard to come by the information about the competitors. The company has to rely on publicly known information which can sometimes be very misleading.

### 2.2.2.2 The Resource-Based View

*When the external environment is in a state of flux, the firm's own resources and capabilities may be a much more stable basis on which to define its identity (Grant 1991 p.116).*

*The Resource-Based View (RBV) approach to competitive advantage contends that internal resources are more important for a firm than external factors in achieving and sustaining competitive advantage (David 2011 pp.96) putting it to a sharp contrast with the Industrial Organization point of view. It claims that the competitive advantage of a company lies in the ownership and the use of valuable - rare, hard-to-imitate, or un-substitutable - resource (physical, human, and organizational). (David*

2011 pp.96) However, the competitive advantage is sustainable only if the resource satisfies all of the three conditions, because then the company's strategy cannot be duplicated.

The heart of the internal analysis based on the resource-based view therefore resides in the identification of these key resources. The strategic plan should be then built around the exploitation of these resources present at the company at the given moment and should aim at maintaining them and strengthening them continually.

## 2.3 Conceptual Phase

*Internal strengths/weaknesses, coupled with external opportunities/threats and a clear statement of mission, provide the basis for establishing objectives and strategies.* (David 2011 pp.93)

The conceptual phase is mainly concerned with the strategy formulation. Given the external and internal analysis, what is the strategy the company should choose to implement? What is the correct direction the company should head in order to efficiently use its inner strengths and to exploit the market opportunities?

First step in the strategy formulation is the definition of long-term objectives, *the results expected from pursuing certain strategies* (David 2011 pp.133). Typically, the strategic objectives involve profitability, market share, return on investment, customer satisfaction etc. The objectives should be quantitative, measurable, realistic, understandable, challenging, and hierarchical and also have its timeline which should be in accordance with the strategy's timeline (David 2011 pp.13). The long-term objectives must be consistent with the company's vision and mission.

The top-down approach is the most common approach to the formulation of strategic plan. On corporate level, the decision is made about the overall company's scope and direction, on business unit level about how the company should behave within each strategic business unit and on functional level, shorter term strategies dealing with each functional area are assessed.

One of the most common tools that can be used while considering strategic options at any given level is the SWOT analysis.

### 2.3.1 SWOT Analysis

The abbreviation SWOT stands for the Strength-Weakness-Opportunities-Threats. The SWOT analysis helps to generate series of strategic options which then have to be evaluated in terms of which allow the company to reach its strategic goals. *The objective is to select the strategies that ensure the best alignment, or fit, between*



*external environment opportunities and threats*, developed during the external analysis stage, *and the internal strengths and weaknesses of the organization* (Hill&Jones 2011 pp.12), obtained during the internal analysis. At the corporate level, the SWOT can help to pick the best balanced portfolio. At business unit level, it can be used to facilitate selection of the strategic plan that will allow the company to achieve a competitive advantage. At any level, it can assist in the process of assessment of the feasibility of the strategic objectives.

The SWOT analysis generates four types of strategic options:

		External Analysis	
		Opportunities	Threats
		<ul style="list-style-type: none"> <li>• O1</li> <li>• O2</li> <li>• O3</li> </ul>	<ul style="list-style-type: none"> <li>• T1</li> <li>• T2</li> <li>• T3</li> </ul>
Internal Analysis	Strengths	<p><b><u>SO Strategies</u></b></p> <p><i>use company's strengths to take advantage of external opportunities</i></p>	<p><b><u>ST Strategies</u></b></p> <p><i>use company's strengths to avoid or reduce the impact of external threats</i></p>
	<ul style="list-style-type: none"> <li>• S1</li> <li>• S2</li> <li>• S3</li> <li>• S4</li> </ul>	Strategic options such as: S1O3 etc.	Strategic options such as: S2T1; S3T3 etc.
	Weaknesses	<p><b><u>WO Strategies</u></b></p> <p><i>aim at improving internal weaknesses by taking advantage of external opportunities</i></p>	<p><b><u>WT Strategies</u></b></p> <p><i>are defensive tactics directed at reducing internal weaknesses and avoiding external threats</i></p>
	<ul style="list-style-type: none"> <li>• W1</li> <li>• W2</li> <li>• W3</li> <li>• W4</li> </ul>	Strategic options such as: W3O2; W2O1 etc.	Strategic options such as: W1T2 etc.

**Figure 4: SWOT Matrix**

Source: Adapted from David 2011 pp.178-180

As in any other analysis, the strategic options should be as specific as possible, and include numbers, percentages or any other measurable values. The goal is not to

implement all the obtained strategies but to provide options for the company to select the best option later on.

## 2.3.2 Corporate Level

*A key part of corporate strategy is making decisions on how many, what types, and which specific lines of business the company should be in* (Mitchell 2009 pp.2).

Corporate level strategy *is concerned with the mix of businesses the company should compete in, and the ways in which strategies of individual units should be coordinated and integrated* (Harvard Business School 2013). This involves decisions on level of diversification, strategies targeting captivation of possible synergies (technology and know-how sharing; procurement leverage etc.), resources displacement between business in growing and stagnating markets, investment priorities but also the decision on what level of growth should be targeted. Generally, these decisions are grouped into three areas: growth, portfolio, and parenting (Mitchell 2009 pp.3).

### 2.3.2.1 Growth

Three basic groups of strategies have been identified concerning the corporate level strategy with respect to growth (Mitchell 2009 pp.3):

- 1) Growth Strategies
- 2) Stability Strategies
- 3) Retrenchment Strategies

#### Growth Strategies

All growth strategies can be again divided into two groups: concentration (vertical or horizontal) and diversification (concentric or conglomerate). If a company's current industry shows a promising potential to the future, it makes sense to concentrate the company's resources in order to exploit the expected opportunity. On contrary, if the industry shows no or little promise for a future growth, it might be beneficial for the company to diversify into other industry segments or even different industries.

Vertical integration, taking over previous or following step in the supply chain, both backward (suppliers) and forward (distributors and retailers) can bring many

advantages in cost, stability or quality of components but also has drawbacks in form of reduced flexibility and increase in exit barriers. Lately, the strategic alliances and outsourcing have been preferred.

Horizontal growth can be viewed in terms of both horizontal integration and horizontal expansion. Horizontal integration involves seeking ownership or increased control over competitors (David 2011 pp.133). As such, it provides advantage in the form of economies of scale or increased market power. Horizontal expansion embodies the product development (completely new products or innovation of current ones) and market development (penetration of new market segments or geographical areas with current portfolio of products).

Concentric, or related, diversification can be described as *diversification into a new activity that is linked to a company's existing activity by a commonality between one or more components of each activity's value chain* (Hall&Jones 1989 pp.168-169). The goal is to create a special advantage through exploitation of these commonalities (technology, customers, distribution etc.). This type of strategic plan is best suited for companies that have a strong competitive position in an industry that is not very attractive.

In order to take a full advantage of commonalities gained through concentric diversification, strategic plans of sharing resources can be implemented. However, this process can be very costly. Therefore, the related diversification should be pursued only if *the costs of implementation do not exceed the value that can be created through the resource sharing and skill transfer* (Hall&Jones 1989 p.175).

Conglomerate, or unrelated, diversification is quite the opposite of the concentric diversification – the company diversifies into an industry that is completely unrelated to its core field of operations. Conglomerate diversification is perceived as having more risks than the concentric diversification as the company is entering a business area it has limited knowledge about.

However, sometimes, the concentric diversification is not possible, for example when company's value chain and core business competences are simply too specific and unrelated diversification is the only option.

### Stability strategies

Stability strategy means that a company chooses to maintain its current portfolio of business units and products, and is comfortable with relative incremental growth. This strategy is suitable for companies operating in a stable environment, not threatened by the external environments, which can therefore focus on improving its internal efficiencies through better resource deployment. However, the company can choose to select stability strategy due to several other reasons:

- 1) Consolidation is necessary after a period of considerable growth before the company can board a growth strategy again
- 2) When the economy/industry is highly volatile and the company needs more time to make sound decision about strategy
- 3) When the industry has reached its maturity point and the company is currently comfortable with its position inside it
- 4) When a company (usually case of small companies) has modest ambition, is comfortable with its current position and wishes to maintain the status-quo (i.e. defend their position)
- 5) When a company possesses a dominant market share and wishes to take advantage of this position and generate cash for future investments

It should be noted that large companies usually do not choose to follow a stability strategy in all of its business segments; rather, they stabilize certain business units and pursue expansion in others.

### Retrenchment Strategies

*The objective of retrenchment is to restructure the operations of a troubled company in order to halt corporate decline and return the company to profitability (Hall&Jones 1989 pp.175-6).* The corporate decline can be caused by many factors, usually containing several of these: poor management, overexpansion and extensive diversification, inadequate financial controls, high cost, new competition and unforeseen demand shifts. Retrenchment can be viewed as more of a strategic response to disfavoured conditions than a willing strategy.

Turnaround, *an attempt to resuscitate or revive the company through a combination of contraction and consolidation (Mitchell 2009 pp.5)*, and retrenchment usually

contain features such as change in management, changes in strategic focus, withdrawal from unattractive markets, divestiture of unprofitable activities and assets, and (or) attempts to improve the efficiency of remaining operations. Sometimes, divestiture is considered a separate type of strategy, however it can be thought of as a part of the turnaround strategy. If no or insufficient progress is made and the turnaround is unsuccessful, the ultimate step is the liquidation of the company.

### **2.3.2.2 Portfolio**

The objective of portfolio analysis is to identify the necessary steps for obtaining a balanced portfolio of businesses, a portfolio that *enables a company to achieve the growth and profit objectives associated with its corporate strategy without exposing the company to undue risks* (Hall&Jones 1989 pp. 185). Portfolio matrix models, such as BCG Matrix or GE Business Screen, have become valuable when reconsidering the company's current portfolio. Its purpose is to help identify possible changes to the portfolio as well as optimal resource allocation.

#### **BCG Matrix**

BCG matrix is a portfolio analysis tool presented by Boston Consulting Group's founder Bruce Henderson in 1970. The idea is to sort the products in company's portfolio in terms of market share and market growth rate, and balance the portfolio with respect to cash.

Four underlying rules are used (Henderson 1970 pp.1):

- 1) *Margins and cash generated are function of market share.*
- 2) *Growth requires cash input to finance added assets.*
- 3) *High market share must be earned or bought.*
- 4) *No product market can grow indefinitely.*

		Market Share	
		High	Low
Growth	High	<p style="text-align: center;"><b><u>Star</u></b></p> <p>Nearly always shows reported profit, but it may or may not generate all of its cash.</p>	<p style="text-align: center;"><b><u>Question Mark</u></b></p> <p>Almost always require far more cash than it can generate.</p>
	Low	<p style="text-align: center;"><b><u>Cash Cow</u></b></p> <p>Generally generates large amounts cash, in excess of the reinvestment required to maintain share.</p>	<p style="text-align: center;"><b><u>Pet</u></b></p> <p>May show an accounting profit, but the profit must be reinvested to maintain the share, leaving no cash throwoff.</p>

**Figure 5: BCG Matrix**

Source: Henderson 2012 pp.1-2

To summarize the BCG matrix core methodology, every company needs a product that generates cash as well as a product in which to invest it in order to convert it into a cash generator itself in the future. *Only a diversified company with balanced portfolio can use its strengths to truly capitalize on its growth opportunities* (Henderson 1970 pp.1). Therefore, the portfolio should contain products in all categories, except for pets. The cash cow is used to finance the market share growth of the question mark, which will either turn into a star or will be discarded as a pet. When the star's market growth slows down, the star will turn into a cash cow financing a new generation of question marks.

### **2.3.2.3 Parenting strategies**

This last element corporate level strategy relates to the coordination and transfer of resources between different products lines and business units. The corporate level strategy should stress out priorities, set the desired level of integration of business units as well as coordinate any transfer of resources between them.

## 2.3.3 Business Unit Level

### 2.3.3.1 Porter's Four Generic Strategies

Even though different companies have different options depending on the external conditions and their internal situation, Michael Porter poses four generic strategies that can serve many companies in a variety of industries (Porter 1998 pp.11):

- 1) Cost Leadership
- 2) Differentiation
- 3) Cost Focus
- 4) Differentiation Focus

Sometimes a fifth option is added: the best cost provider. However, it does not belong to the original concept. Porter also advises against implementing a combination of these for a given product (Porter 1998 pp.17) as the company's resources and focus would become too diluted.

The base of all these strategies lays in the only two possible ways of obtaining a competitive advantage (cost/differentiation):

Cost leadership is related to the ability to provide a given product to the market at the lowest price available without excluding features the customers consider essential. The company must pursue continual effort to reduce costs. In order for a competitive advantage to be sustainable, the process allowing such low costs must be hard for a competitor to match or copy. A rival company would attempt to duplicate it otherwise. However, this strategy is suitable for large markets only – as the profit margin is very small, the volume sold must be significant so profit can be obtained.

Differentiation strategy is connected to the other way of obtaining a competitive advantage – the ability to differentiate the product in a way that customers are willing to pay a premium price.

### 2.3.3.2 Competitive Tactics

Timing Tactics are concerned with the timing of a strategic move, a crucial element of every strategic plan. Being a first mover might bring non-negligible advantage but

it can also be a risk. When imitation of first mover's product is easy, the late-comers can reach the first mover's position soon enough without the risk of uncertainty about market establishment. However, if the first-time customers are brand loyal or the early adoption brings significant profit and/or other advantages, the first mover gains a major competitive advantage.

Market location tactics can be split up into opposed tactics: offensive and defensive. The offensive tactics' goal is to take a market share from the rival companies whereas defensive tactics target sustainment of the company's market share while the rival companies attack using offensive tactics. Defensive tactics could for example incorporate attempts to raise barriers to entry or to reduce the inducement for attack (possibly through prices cutback). Offensive tactics integrate attacks on market segments where the rival companies are weak, attempts to increase the market share at the expense of the rival companies through introduction of new, superior that makes the competitors' products obsolete.

### 2.3.4 Functional Unit Level

Functional level strategic plan could be perceived as a selection of a functional area specific set of rules aiming at achievement of corporate and business units' objectives through maximization of the resource productivity. The scope of each functional area's strategic plan and their amount can vary significantly due to large variety of organizational structures. Nonetheless, all of these plans – marketing strategy, finance strategy, R&D strategy etc. - must be consistent with the overall corporate direction.



## 2.4 Implementation Phase

*A technically imperfect plan that is implemented well will achieve more than the perfect plan that never gets off the paper on which it is typed* (David 2011 pp.212).

Implementation is a process of translating the high-level plan into operational planning and action items. The strategy formulation is about what and why, whereas the implementation communicates the other important aspects – who, when, where and how. Even the best formulated strategic plan can have long-lasting disastrous results if not implemented properly. As the strategy implementation is considered one of the main pitfalls of the strategic planning process, the ability to implement the strategic plan effectively can actually be view as a competitive advantage.

The implementation of a strategic plan is primarily operational process and requires a completely different set of skills, i.e. motivation and leadership skills, as it requires coordination of large groups of people. The strategic plan has to be thoroughly communicated to every person in a company in a way they can understand it and identify themselves with it. This is essential as the competencies are transitioned from the top-level management to lower-level management/employees that are then responsible for its execution/implementation.

The main issues to be addressed while implementing a strategic plan are *establishing annual objectives, devising policies, allocating resources, altering an existing organizational structure, restructuring and re-engineering, revising reward and incentive plans, minimizing resistance to change, matching managers with strategy, developing a strategy-supportive culture, adapting production/operation processes developing an effective human resources function, and, if necessary, downsizing.* (David 2011 pp.214)

## 2.5 Strategy Evaluation

*The best formulated and best implemented strategies become obsolete as a firm's external and internal environment change* (David 2011 pp.286).

Every strategic plan is based on the underlying conditions of the competition and the macro-environment. But as said before, these are not fixed and tend to vary over time. No strategic plan can succeed without timely adjustments in case a key assumption(s) does not follow the forecasted path. Therefore, a systematic review and control, either periodic or continuous, is essential to the correct functioning of any strategic plan and plays an important role in it.

There are three basic activities/stages of the strategic plan evaluation (David 2011 pp.286):

- 1) Examining the underlying bases of a company's strategy
- 2) Comparing the expected results with actual results
- 3) Taking corrective actions

### Examining the underlying bases of a company's strategy

Both macro-environmental setting and competition should be examined and compared to the strategic plan foundations. This is important even if the company's results (either financial or in terms of sales etc.) do not indicate any issues. The time horizon in which this element affects the key performance indicators might be lagged and it might be too late for any refinement when the misbehavior actually occurs.

What was the reaction of the rival firms to the company's strategy? How (if so) did their strategy change? Is the global economy behaving as expected? Is the demand somehow different? Any new (de)regulation, the company did not count with, occurred? These are just a few examples of question that should be answered during this stage of evaluation. If the actual underlying base is significantly different, corrective actions, the stage three, must be taken.

### Comparing the expected results with actual results

The criteria should be formulated during the creation of the strategic plan as the representatives of the strategic goals. Their expected values/results should be

specified, including the confidence intervals. They should preferably be both qualitative and quantitative, but mainly measurable and verifiable. The most common quantitative criteria are the financial ratios used to compare the company's results over time, to the competition and to the industry segment. However, when using outside sources, possibility of different accounting method should be taken into consideration as they can otherwise lead to misleading results. One of the most common concepts used is the Balanced Scorecard (BSC). The idea behind the BSC is that the performance of a company cannot be evaluated solemnly by financial measures, three more criteria: innovation and learning perspective, customer perspective, and business process perspective, should be considered as well as they provide with the drivers of the future financial performance (Kaplan&Norton 1990).

### Taking corrective actions

Taking corrective actions does not necessarily mean that significant changes have to be carried out or a completely new strategic plan has to be devised. However, if the gap between the expected conditions and the reality is too wide, this is usually the best option. In case the difference is neither marginal nor outstanding, a slight alteration in either strategy formulation or implementation should suffice. Nevertheless, the refinement should be done in the shortest period possible so the gap does not extend further and cause more trouble than it actually had to.

## 3. Strategic Analysis of the Czech Telecommunications Industry

The telecommunication industry in the Czech Republic is expected to undergo immense change in a year's time new player shall join the market after the auction for LTE frequencies. The theoretical concepts presented in the previous section shall now be applied to the pre-entry environment in order to provide its strategic analysis. Telefónica Czech Republic has been chosen to act as a basis for the analysis as it is the most complex incumbent and the only fully integrated operator in the country. As this thesis does not intend to create a new strategic plan, the vision and mission statements shall be left in their current form.

*“Improving people’s lives around the world by transforming possibilities into reality – building a better future for everyone.” (TEF 2013/a)*

### 3.1 Analytical Phase

#### 3.1.1 Czech Macroenvironment

##### 3.1.1.1 Macroeconomical Situation

Based on the information available at the webpage of Czech National Bank, the GDP of the Czech Republic decreased in 2012 by 1.1% (year-to-year) after two years of growth, it is expected stagnate next year (year –to-year decrease by 0.3%) and it should return to growth in 2014 (2.1% year-to-year). The Czech Koruna should slightly appreciate toward EUR reaching the exchange rate 25CZK/EUR. Inflation should remain stable below 2%. The 3M PRIBOR is expected to be increased only slightly from current 0.4% to 0.5% in 2014 (ČNB 2013).

##### 3.1.1.2 Technological Orientation

The telecommunication industry obviously highly depends on the technological advancement and is interconnected with it. With respect to technology, there are three

main types of mobile networks in the Czech Republic – 2G, 3G and 4G. The 2G network is based on the GSM technology operating at the 900MHz frequencies spectrum. The 3G network was first introduced by Eurotel (acquired by TEF S.A. in 2005) in the form of the CDMA2000 technology and was prepared for commercial business by 2004. However, the UMTS technology is the current industry standard in the Czech Republic and it has been in use since 2005. The CDMA used by U:FON (410-430MHz) and other TEFCZ uses it only in special legacy projects. The 4G is currently only operational in the pilot programs of TEFCZ and TMCZ (both since 2012) and is expected to be launched by these companies in 2013 on the 1800MHz spectrum. The 4G also operates on 800MHz and 2600MHz.

The European Union was announced earlier this year<sup>2</sup> a 50 million EUR research grant to encourage the development of “5G” technology. The entire grant is to be delivered by 2020. European Commission Vice President Neelie Kroes said, “I want 5G to be pioneered by European industry, based on European research and creating jobs in Europe – and we will put our money where our mouth is.” (Kroes in European Commission 2013)

As to the fixed telephony and fixed data, the most common technologies are xDSL (ADSL and its successor VDSL) and FTTx (optical cables) together with older metallic cables. IPTV is also run on optical and metallic cables; but requires proximity to optical cables due to the data demand.

### 3.1.1.3 Social/Demographic Factors

The demographical situation in the Czech Republic is similar to the one in Europe in general. The population is aging as the life expectancy increases and less children are being born which constitutes a serious problems for the pension system. More and more people obtain a tertiary degree (the master degree is still considered the only full university degree). Even so, there are not enough students of the technological degrees which pose an issue for the Czech Republic as an industrial country. Unemployment is currently moving slightly above 8%.

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<sup>2</sup> 26.2.2013

As to the social situation, the generation Y, generation that grew up surrounded by modern technologies, is joining the work force at the moment. However, in contrast to Western Europe it is not following the generation X, but the generation of “Husakovy deti” (Husak’s<sup>3</sup> children). It is a shift to a completely different group of people, to a group of global citizens who did not grow up under the influence of communism.

### 3.1.1.4 Political/Legal Environment

The entrepreneurial environment in the Czech is established by two main Codes – the Commercial Code and the Trade Code. But it is under the ongoing process of harmonization with EU legal environment. The legal environment is considered a complicated one due to the complexity of the legislative and tax system, and its administrative demandingness. Czech business environment is also considered problematic in terms of corruption and non-transparent behavior of public institutions.

As to the regulatory conditions of the telecommunication industry, it falls under the influence of ÚOHS as any other businesses, and the industry regulator Český telekom (ČTÚ, Czech Telecommunications Office). ČTÚ sees the telecommunication industry as not competitive enough due to presence of companies with large market power. It is also indirectly influenced by the European regulator BEREC (Body of European Regulators for Electronic Communications).

**To recapitulate**, the macroeconomic conditions in the Czech Republic are very similar to the rest of Central Europe. Czech Republic is still experiencing economic downturn reducing GDP and interest rates, increasing unemployment, and population aging is presenting serious issue for the future. The industry is regulated by national ČTÚ and European BEREC. The industry standard for 2G is GSM, for 3G is UMTS, although CDMA can be found as well, and 4G is LTE.

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<sup>3</sup> Gustáv Husák – the eight president of Czechoslovakia (1975-1989), previously long-term leader of the communist party

### 3.1.2 Telecommunication Segment: Competitive Analysis

The environment in which TEFCZ is competing can be split up into three segments: mobile market, fixed telephony and fixed broadband (including IPTV). Each of these segments is different in terms of competition and industry life-cycle. The mobile segment currently presents the greatest opportunities in comparison to declining fixed telephony with fixed broadband being somewhere in between. The mobile segment is usually viewed as oligopolistic with only three large players whereas the other two segments contain a large number of players with TEFCZ in a dominant position thanks to the access network inherited from Český Telekom.

#### 3.1.2.1 Rival Companies

Three classical mobile telecom companies currently compete on the Czech mobile market:

Telefónica O2 Czech Republic, a.s. (TEFCZ)

Vodafone Czech Republic, a.s. (VODCZ)

T-Mobile Czech Republic a.s. (TMCZ)

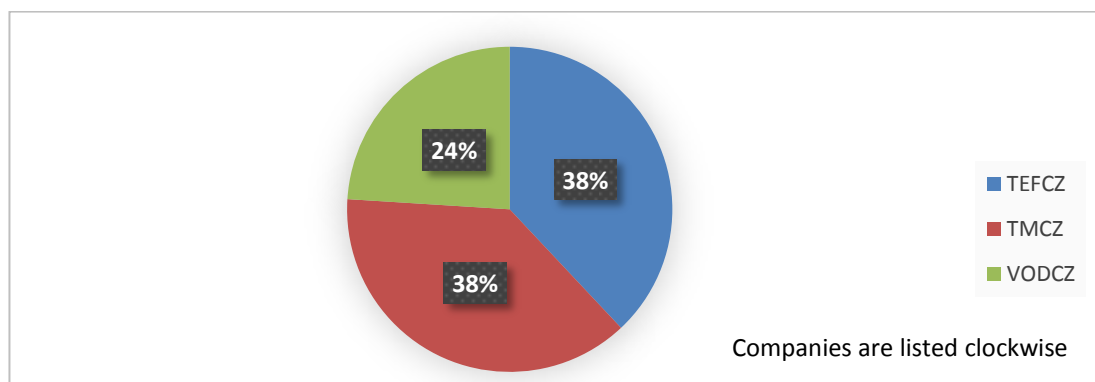
Each of these mobile network operators is backed by a strong global group. A virtual operator, Blesk Mobil, is in presence since the end of 2012, two more, Tesco Mobile and GTS Czech, are expected to open for business later in the summer of 2013.

#### U:FON

- Operating in CZ since 2007
- Only “3G” coverage – specific CDMA technology
- Dec 2012 acquired by AirTelecom while in the insolvency proceedings

**Table 1: U:FON Operator**

Source: own

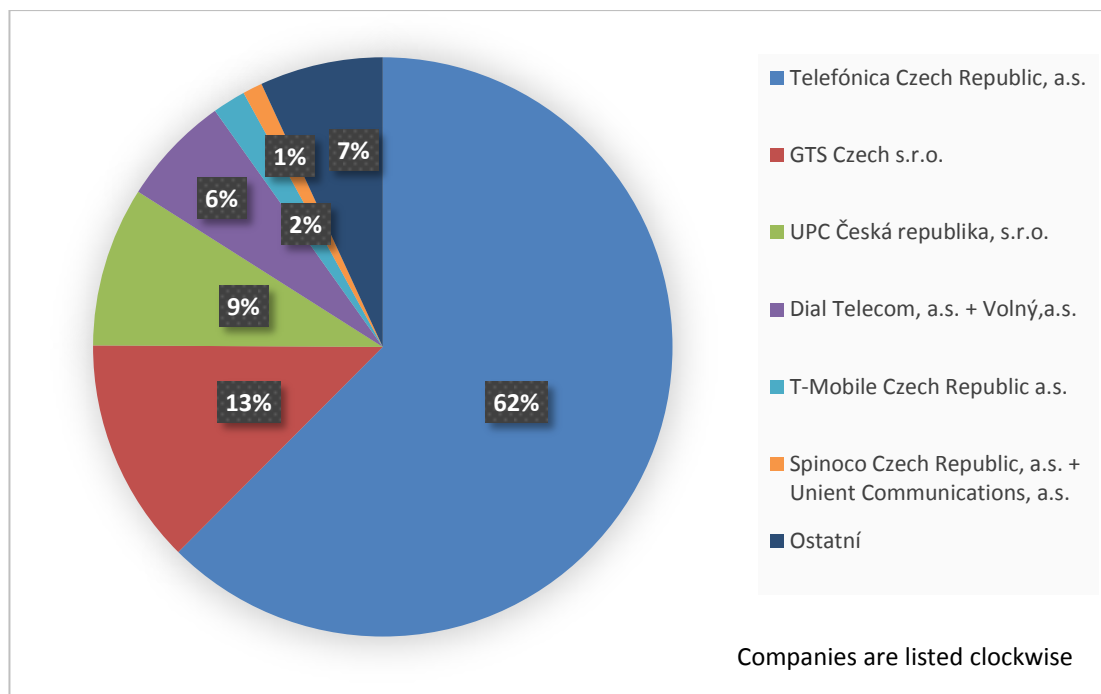


**Figure 6: Mobile Segment Market Shares**

Source: ČTÚ 2012/a

In the Czech Republic, the mobile market penetration is 130%, meaning that in 10 people, three of them own two active SIM cards (Forbes 2013). The mature, highly saturated market leads to stiff competition and fall in prices as the growth in this industry segment can only be reached at the expense of a rival company. However, the industry regulator ČTÚ wishes an entry of a fourth mobile network operator (MNO) as it believes decline in prices is not fast enough, as none of the incumbents is inclined to lose its profit margin too soon. ČTÚ knows that the market penetration together with “no differentiation” issue described later in this chapter will necessary lead to price wars<sup>4</sup> at the entry of fourth telecom operator as the new entrant can expect severe retaliation from the side of the incumbent companies.

The market for fixed telephony (i.e. with place of origination) could seem much more diluted as there are 28 subjects competing. However, the position of TEFCZ is uncontested and the industry regulator decided that a close monitoring should be put in place.



**Figure 7: Fixed Telephony Market Shares**

Source: ČTÚ 2013/c pp.72

<sup>4</sup> The price wars have already started only in anticipation of a new entrant. More in: Current Campaign from Strategic Perspective (section 3.6.1)



The dominant position of the TEFCZ does not lie only in market percentage, TEFCZ owns the largest access network for provision of services in a fixed origin gained by the acquisition of Český Telekom in 2005. The TEFCZ is therefore unique as many services provided by other providers on the Czech market are dependent on the wholesale prices of TEFCZ. Also, a duplicate access network cannot be developed in such an extent by an alternative competitor as the cost would be much higher than the respective benefits (ČTÚ 2013/c pp.64) as the fixed telephony market is declining.

The third market segment TEFCZ is competing in is fixed broadband (FBB), the high-speed internet access, including the IPTV. ČTÚ's definition of broadband differs from the European one; it uses the minimum limit of only 256kbit/s combined with permanent accessibility (for comparison the Digitální Česko program uses the limit of 2Mbit/s). The FBB is highly interconnected with the fixed telephony in terms of the network which means TEFCZ again has a unique advantage as well due to its exceptional access network. However, there is large range of internet providers with local networks operating in different regions. TEFCZ's advantage lays in country-wide access network obtained through acquisition of Český Telekom. It allows to have TEFCZ to have 85.2% market share in xDSL (as to the end of 2011, ČTÚ 2012/b pp.41). Even so, the local providers score locally with their FTTx (optical cables) as they allow for greater speed and comfort (ČTÚ 2012/b pp.44).

<b>Company</b>	<b>Services Provided</b>
GTS Czech s.r.o	Internet, Voice, ICT, Data
UPC Česká republika s.r.o.	Internet, TV, Voice, Data
T-Systems Czech Republic a.s.	Internet, TV, Voice, Data
ČD Telematika a.s.	Internet, Voice, Data
Dial Telekom a.s.	Internet, Voice, Data
S E L F servis, spol. s.r.o.	Internet, TV, Voice, Data

**Table 2: Fixed Broadband Providers - examples**

Source: Own Research

**To conclude**, TEFCZ is competing in three main segments: mobile segment, fixed telephony and fixed broadband. In the mobile segment, TEFCZ is competing head to head with TMCZ and with VODCZ close behind. In the fixed segment, TEFCZ has an untouchable competitive advantage, recognized by ČTÚ, due to its access network unduplicable by its competitors.

### 3.1.2.2 Threat of Entry

Threat of entry can be considered from two specific perspectives in the telecommunication industry: entry of a standard mobile network operator (MNO), and entry of a mobile virtual network operator (MVNO). The main difference between these two is the fact that a virtual operator does not own any network but operates within the network of a regular MNO. Therefore, MVNO can enter the market anytime it reaches an agreement about network usage with a MNO whereas a MNO has to purchase spectrum licenses first, i.e. through auction.

Threat of entry of a new player is currently considered serious due to the conditions set by ČTÚ for the new auction of mobile broadband frequencies. Usually, the costs of building an own network (or access to incumbent companies' network through national roaming or wholesale) and the regulatory conditions, in terms of ownership necessary frequencies, are put as an example of the entry limitation. However, ČTÚ attempts to address these while auctioning off the new frequencies. An auction of LTE broadband mobile network frequencies is about to start again in Czech Republic (ČTÚ 2013/a), after the previous one was cancelled on 8th of March by the industry regulator ČTÚ due to excessively high bids of the operators and also, as the market believes, due to poor set-up, such as the possibility to withdraw the highest bid several times without any kind of penalty. The auction lasted for several months and none of the participants made a step-back. This means the auction could have lasted for years, also due to low limit on minimum bid-up and only one round per day.

This time, ČTÚ has reserved a block of  $2 \times 10$  MHz in the 800 MHz band, in addition to the previously reserved blocks in the 1800MHz band, for the new operator<sup>5</sup> as a motivation to entry. TEFCZ already called this process discriminatory and will

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<sup>5</sup> In this case, a new operator is described as an operator without purchased 900MHz band.

petition it in the prompting process. The conditions also require the incumbent companies (if they wish to obtain any frequencies in this auction) to allow the newcomer a national roaming, an access to public communication network(s) operated by the company using the radio frequencies in bands XX (dependent on type of network – 2G/3G/4G) on which the company operates its public 2G/3G/4G services, for a ten year period. However, the newcomer has to build its own network covering 20% of Czech population first. Additionally, the companies have to publish an appropriate wholesale pricing for an access to its network for any MVNO wishing to enter the market (ČTÚ 2013/a).

Therefore, the newcomer can build the obligatory network and then benefit from the possibility of roaming, as has been recently done by Telefónica Slovakia (TEF SK) who entered the Slovak market in the beginning of 2007 and is building its proper network at a much slower pace than its competition (STU 2012). At the same time, TEFSK has won the Operator of the Year in 2012, for the fourth time in a row meaning that operating in national roaming does not necessarily provide the customers with an inferior experience.

Mostly likely, the PPF Mobile Services, who took part in the previous auction and already applied for participation in this one, is to be the new player in the field of mobile telecommunications. Complaints have been raised that by speeding up the process for the second auction, ČTÚ is not allowing other companies to enter the auction. On the other hand, PPF Mobile threatened to exit the auction if the process became too lengthy.

Even if offered a preferential way in by ČTÚ by reserved spectrum bands and the obligation of national roaming, the new entrant can expect retaliation from the side of current industry segment players. The telecommunication market in the Czech Republic is a mature one and therefore a larger market share can be obtained almost exclusively through acquisition of current customers of the incumbent companies. All three present telecom operators present are members of large international telecom groups who are used to disposing of significant resources on acquisitions. However, market changes in recent years have led to declining OIBDA and ARPU, diminishing the groups' power in the process as well. Therefore, the level of retaliation large,

strong financial institution as PPF (presuming PPF as the entrant) can expect is much lower than several years ago.

The threat of entry for an MVNO is somewhat specific in comparison to the entry of traditional operator. The MNOs do not build an owned network but they operate inside the network of an incumbent company. ČTÚ is currently attempting to set the rules so the telecom operators would have to publish a wholesale price for which they would be obliged to sign a contract with a potential MVNO given certain rules have been fulfilled. In anticipation of this, TEFCZ has let two MVNO, Blesk Mobil a Tesco Mobil<sup>6</sup>, and T-Mobile one MVNO, GTS Czech, into their networks.

The expected regulation is not the only reason, the telecom operators has started cooperating with the MVNOs. As the ARPU, and therefore the revenues in general, are falling, the telecom companies have to search for new way of covering their costs, and boosting their income. MVNO helps the company to fight the shadow operators that have been causing a lot of trouble in the past<sup>7</sup> by providing similar services. However, in this case the operators obtain significantly larger profit through fees and/or profit sharing. Consequently, the admission of an MVNO allows the MNO to cover a portion of their enormous fixed cost.

The MVNOs cannot be seen as a full direct competition as they target the low-cost niche market (more on the exception of GTS Czech later on). These customers are usually unprofitable for the premium operators such as TEFCZ and TMCZ in terms of the cost of the value added services the customers obtain (call centers, proximity of branches etc.) and the amount they pay. Therefore, these companies actually save letting these (mostly prepaid) customers go and gain when these customers acquire the services of “the company’s” MVNO. GTS Czech operating in the TMCZ’s network is an exception, based on the agreement between these two companies; GTS is targeting the corporate segment. However, I could not have come with any

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<sup>6</sup> Tesco Mobile is not a full MNO as TEFCZ has 50% of its market shares.

<sup>7</sup> One of the most well-known shadow operators is Bonerix, currently operating within the TEFCZ group. TEFCZ acquired Bonerix in 2012 to prevent long-lasting litigations.

reasonable explanation for this TMCZ's step as the corporate customers are the most pampered customers as they bring the highest revenues.

**To sum up**, threat of entry has to be seen from two different perspectives: MNOs and MVNOs. However, threat of entry is no longer a "threat" but more of a reality due to the conditions of the LTE frequencies auction – full MNO shall join the market in a year and three MVNOs have done to date. Though, MVNOs cannot be considered as complete rivals as they usually services different market niche and can offer benefits to "its" incumbent in terms of fixed costs coverage and fight against shadow operators.

### 3.1.2.3 Suppliers and Buyers

When we want to talk about the bargaining power of customers, we must divide them into two basic groups: the corporate customers, and the residential customers. The position of the corporate customers is notably better than the residential customers' one as their ARPU is significantly higher and also because they require more services for larger number of people, both mobile and fixed services. The larger the company is (meaning in terms of services provided) the better pricing offer it gets. Even though lower prices and higher ARPU might look antagonistic, it is not. The corporate customers are able to obtain better prices for each product due to bundling services. These bundles are what in the end increase the ARPU. The large companies can actually be seen as a first generation of the virtual operators offering cheap telecom services to employees and friends as one of the company benefits<sup>8</sup>. The negotiating power of the residential customers is not strong – the group is large, but heterogeneous and fragmented which therefore results in almost no bargaining power.

The position of the supply sector is, due to its relative fragmentation, not very good either. Even though the technological demand is high, most technologies are already produced by several companies. The telecom operators are large purchasers of these technologies and are very well aware of this. Therefore, they pressure the suppliers to always offer a better price. Due to technology aging, the contracts are renegotiated every few years and swaps to technology of a different supplier are made if the

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<sup>8</sup> One of the examples can be ČEZ – it is offering advantageous tariffs to its employees and friends.

potential new supplier offers conditions exceeding the switching costs. Also, as emerging market suppliers, such as Huawei several years ago or ZTE, wish to enter the European continent and establish a position there, they offer pricing arrangements the old companies cannot match as they are looking more onto the long-term horizon. Consequently, the telecom operators can impose ever-growing power over its suppliers as the technologies' life-cycle shortens and the emerging East develops further. Moreover, the telecom companies can use its positions in the global groups and negotiate with suppliers through global tender, i.e. TEFCZ can join forces with TEF EU or even TEF LATAM. Consequently, these negotiated deals often amount up to tens of millions of EUR which tend to lead to long-lasting battles between the suppliers about who can offer better conditions and therefore wins the tender.

#### 3.1.2.4 Substitutability

Substitutability is one of the factors that have changed the most in lately. Previously, the telecom operators were able to compete through the network coverage and service quality which is almost not possible anymore and this trend will definitely continue. All telecom operators possess the country-wide coverage. No drop calls, voice quality and high-speed data are considered as standard and offered by all. The mobile devices were never locked to be used only in a certain network as in the case of the USA and the mobile number portability, whose unavailability was previously one of the highest switching costs, is, again, a standard procedure. This allows for a trouble-free switch to a different provider as the core services are fully substitutable and the telecom operators are left to compete on prices and/or attempt to differentiate through additional services.

The substitutability also increased through mobile-fix substitution. Mobile phones are replacing the fixed lines in terms of telephony. Even though, the internet connection provision still relies on the fixed lines due to technologies such as VDSL allowing for much greater speed than the mobile connections, the situation is not expected to last. The introduction of LTE technology has been announced for this year and the speed of data transmission should be comparable to VDSL. This substitution is issue mainly for TEFCZ as the largest provider of fixed services. By introducing new mobile technologies it is actually offering new substitutes for its current, fixed services and it can be seen as balancing on an edge of a cliff. However, this is necessary in order not

to lose a competitive position in mobile segment, a segment that still has a long-term growth potential in comparison to the fixed segment.

### 3.1.2.5 Competitive Environment in Short

Due to the high substitutability of the services, telecommunications should be a highly competitive market. But as the barriers to entry used to be high, the industry is not very fragmented, and the bargaining power of the largest and most seen group of buyers, the residential customers, is very low. Therefore incumbents were happy (and able) to maintain the status quo and were not inclined (and forced) to fight hard against each other as it would reduce their margins. The only serious competition concerned corporate customers and has been carried out behind closed doors through discounts, bundled services and personalized offers. However, even before the threat of entry turned to reality, the competitive environment started to change in its anticipation resulting in the first round of serious price wars after the introduction of TEFCZ's "Free" tariffs.

### 3.1.3 Internal Analysis of Telefónica CZ

It is essentially impossible to analyze the internal conditions of a company from the perspective of an outsider, or better said without the possibility to publish its outcomes due to the high sensitivity of the data. Therefore, the thesis has to suffice with the publicly known information which can be imprecise or even misleading to a certain extent.

A number of aspects are enumerated in S-W part of the SWOT analysis following this section. As to the most important elements that provide the basis of the strategy formulation, few factors should be described in greater detail:

#### Free Capacity at the 1800MHz Frequency Band (S)

TEFCZ uses the 1800MHz only as a capacity support, as well as TMCZ, and have the 900MHz as the main band for GSM coverage. However, VODCZ started its coverage at the only available spectrum at the moment – 1800MHz, and even though it has shifted towards 900MHz when obtained, VODCZ has the 1800MHz highly interconnected with GSM. Although it might seem insignificant at first, it is not due to so-called “technological neutrality of spectrum” ruled by EU last year.<sup>9</sup>

#### Spanish Controlling Company with leverage exceeding the value of the company (W)

Even though the financial position of TEFCZ and its low-leverage, the financial difficulties of the controlling company would highly influence TEFCZ in case it needed to borrow a larger amount of money. This is caused by the internal procedures of the banks – large loans have to be approved by the bank’s controlling company. However, these loans are then not assessed at the individual level but rather on the corporate level. Therefore, despite the fact that TEFCZ has low-leverage it would face serious difficulties obtaining this loan as the financial channels have been drained by the controlling company.

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<sup>9</sup> Previously, each spectrum was assigned to certain technology by ČTÚ and could not be used for any other technology. After the ruling of EU, the operators were allowed to ask the regulator to free their spectrum band from this spectrum specificity.



## 3.2 Conceptual Phase

### 3.2.1 SWOT Analysis

Based on the external and internal analyses the following SWOT matrix has been devised:

#### Strengths:

- 1) The only Czech integrated operator
- 2) Unique access network
- 3) Dominant position on the home market of fixed lines
- 4) Strong subsidiary company Telefónica Slovakia
- 5) Low leverage
- 6) CSI in corporate customers segment
- 7) High network capacity
- 8) Employees with long-term experiences in the telecommunication segment
- 9) Experience with network-sharing
- 10) Capacity at the 1800MHz frequencies band
- 11) Image of First Mover and Innovator

#### Weaknesses:

- 1) Cannibalism (in terms of fixed and mobile services substitutability)
- 2) Spanish controlling company with leverage exceeding the value of the company
- 3) Low loyalty and satisfaction of residential customer segment
- 4) Residuals of old infrastructures of Eurotel and Český Telekom that has to be dealt with through costly restructuralsations

#### Opportunities:

- 1) Demand for high speed mobile data
- 2) LTE broadband mobile network frequencies auction
- 3) ICT segment
- 4) Market penetration in terms of smartphones and secondary devices such as tablets

**Threats:**

- 1) Unsuccessful auction of LTE frequencies resulting in loss of competitiveness in the mobile segment
- 2) Regulation from the side of ČTÚ and EU (BEREC) – termination fees, (inter)national roaming, wholesale obligations
- 3) Fourth mobile network operator
- 4) Decreasing ARPU
- 5) OTT
- 6) Future lack of qualified employees, mainly in technologically demanding functional units
- 7) Decline in the fixed segment
- 8) Change of government heading towards left – tax increases etc.

### 3.2.2 Corporate Level Strategy

Telefónica Czech Republic is part of global Telefónica Group based in Spain and as such its strategic plans are created in the frame of the overall group's strategy. The objective of the analysis of the corporate level strategy is to place TEFCZ within the entire TEF Group including a brief description of the group itself and the assessment of strategies influencing TEFCZ, or more precisely, influencing the TEFCZ's behavior in the process of LTE roll-out and the entry of a new player. Last, the position of TEFCZ as a controlling company itself shall be mentioned.

Telefónica Group is one of the world's leading integrated operators in the telecommunication industry. It operates in 25 countries and has over 315 million customers (212million in Latin America and 103 million in Europe, Dec 2012). It has a strong international profile with 76% of its business outside its home market. Telefónica is also the largest telecommunications company in Europe in terms of market capitalization and it is being traded on Spanish stock exchanges as well as in London, New York, Lima and Buenos Aires.

BASIC FINANCIAL INFORMATION (in MEur)	
Revenues	62.356
OIBDA	21.231
Net Profit	3.928

**Table 3: TEF Group – Basic Financial Information**

Source: TEF S.A. 2013/b

The organizational structure of TEFG is a mix of geographical and business unit structure – it is split into two geographical regions: Europe (consisting of Spain, UK, Ireland, Germany, Czech Republic, and Slovak Republic) and Latin America; and one global division: Telefónica Digital. *The mission of Telefónica Digital is to seize the opportunities within the digital world and deliver new growth for Telefónica through research & development, venture capital, global partnership and digital services* (TEFCZ 2013/a p.17). The global corporate strategy is the responsibility of the Corporate Center. *Corporate Center is responsible for its global and*

*organizational strategies, its corporate policies, management of common activities, and coordinating the activity of business unit (TEFCZ 2013/a p.17).*

With 7.9million customers, Telefónica Czech Republic belongs to the smallest branches in Europe (for example, Telefónica Spain, the largest branch, has 43.1million customers). In terms of the BCG Matrix, TEFCZ's position within the group could be described as Cash cow as its market share is high (38%) and the telecommunications market is currently growing very slowly.

		Market Share	
		High	Low
Growth	High	<b>STAR</b>	<b>Question Mark</b>
	Low	<b>Cash Cow</b> TEF CZ	<b>Pet</b>

**Figure 8: TEF CZ Position BCG Matrix**

Source: Adapted from Figure 5: BCG Matrix

In terms of parenting strategy, TEF can be seen as an active controlling company that takes interest in not only the financial results but the overall operations. It takes part in establishing investment priorities, coordinates transfer of know-how, vendor management and organizes global tenders aiming to exploit the procurement leverage.

As to the growth and portfolio strategies, they are highly interconnected at the moment. Due to its financial difficulties TEF is forced to follow the divestiture strategy and optimize its portfolio. Its current leverage exceeds the value of the company and even though its position improved significantly compared to 2011, TEF's difficulties are expected to continue as the macroeconomic situation in Spain is not improving. Therefore, TEF sold 50% of its shares in China Unicom Limited (keeping 5% share) and also IPOed Telefónica Germany (23.2% sold) last year.

There have been many speculations about selloff of TEFCZ to the hands of PPF. However, these speculations have been denied by both TEFCZ and PPF, and as PPF is preparing to enter the Czech telecommunications market with its own MNO called PPF Mobile, the rumors about the divestiture have died away for the moment.

TEFCZ is in the position of a controlling company towards its subsidiaries CZECH TELECOM Austria GmbH, CZECH TELECOM Germany GmbH, TEFSK, Internethome s.r.o., and Bonerix s.r.o. (TEFCZ has 100% share of all the businesses). Only Internethome and Bonerix operate on the Czech Market. Therefore, TEFCZ is also responsible for “lower-level corporate strategy” with respect to these companies. Bonerix can be thought of as TEFCZ’s own MVNO as it used to be a shadow operator in TEFCZ’s network and TEFCZ bought it only last year to prevent long-lasting litigations.

Subsidiary Name	Registered Business
CZECH TELECOM Austria GmbH	Public service of leased lines over a fixed telecommunication network
CZECH TELECOM Germany GmbH	Leased lines
Telefónica Slovakia s.r.o.	Operation of a public telecommunication network; public telecommunication service of leased lines
Internethome s.r.o.	Provision of Wi-Fi internet access
Bonerix s.r.o.	Operation of a public mobile communications network; public telephony; data transmission; internet access

**Table 4: Subsidiaries of TEFCZ**

Source: TEFCZ 2013/a pp. 56

**To sum up**, even though TEFCZ is one of the smallest companies within the European part of the group, it plays an important role of a cash cow. The financial situation of the controlling company has been limiting corporate strategic options forcing TEF to follow the divestiture strategy. There have been speculations about a possible divestiture of TEFCZ but they turned out to be wrong. TEFCZ is creating a corporate strategy as well with respect to its five subsidiaries out of which only two, Bonerix and Internethome, operate on the Czech market.

### 3.2.3 Business Unit Level Strategies

Large telecommunications market changes have been expected since the announcement of the first frequency auction in 2012 as ČTÚ connected it to the entry of a new player. TEFCZ, together with the incumbent companies, was forced to reassess its strategic position based on that. They benefited from the abortion of the first auction and declaration of a new one as it provides them more time to prepare for these changes in terms of immediate actions as well as the longer run perspective. TEFCZ is exploiting this opportunity greatly as can be seen in the following sections.

#### 3.2.3.1 Current Campaign from Strategic Perspective

TEFCZ introduced the current campaign at a press conference on 11th April 2013 and the “FREE tariffs” has been filling the front pages of all national wide newspapers ever since. Its steps were followed by VODCZ and TMCZ on Friday 12th, respectively on Saturday 13th as they were forced to lower prices to match TEFCZ’s level in order not to lose their customers. However, it is clear that the competitors responded in panic as they did not expect TEFCZ’s move. There have been many speculations in media why TEFCZ broke the so-called “collusive oligopoly”.

The current campaign of TEFCZ provides an excellent example of a precaution of an incumbent aiming at improving its market position, minimizing the operational space for the new entrant and also reducing the entrant’s incentives to enter. The introduction on new MVNOs to the market also pursues the same goal.

In terms of SWOT analysis, such strategy and its goals can be described followingly:

S: Unique access network

Image of First Mover and Innovator

W: Low loyalty and satisfaction of residential customer segment

T: Fourth mobile network operator

Decreasing ARPU

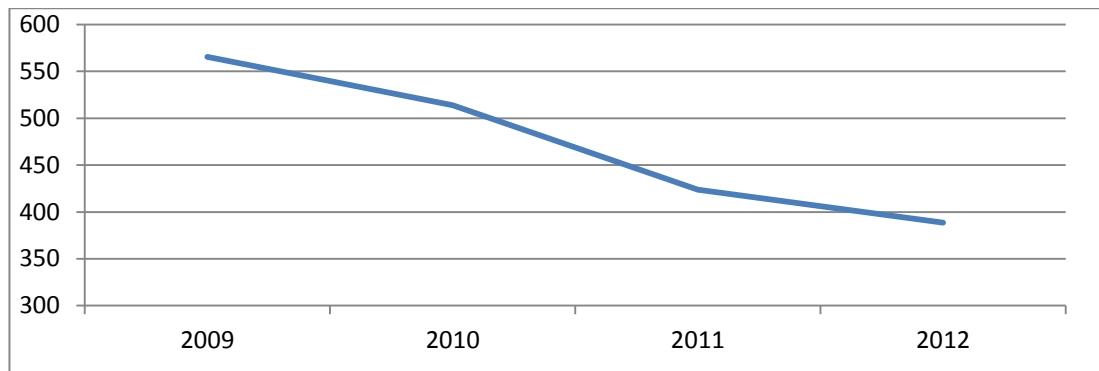
Improvement of the CSI, i.e. addressing the weakness “Low loyalty and satisfaction of residential customer segment” is presented as the main reason of this campaign. Customers were complaining more and more about the incredibly high prices, one of the highest in Europe. They were also dissatisfied with the complexity of product portfolio containing hundreds of different tariffs – catalogue tariffs, retention tariffs etc. The goals of the FREE tariffs were therefore supposedly simplification of portfolio and to offer the customers better value for their money. TEFCZ introduced three domestic tariffs and two European tariffs with unlimited voice and text, so called flat tariffs, scaled by the termination network. These tariffs are easy to orient in and their prices incomparable to the previous ones which perfectly matches the customers’ demand and therefore excellently addresses given weakness of TEFCZ.

Attraction of new customers is also seen as one of the targets but its attainability limited as it must have been expected that TEFCZ’s main competition, TMCZ and VODCZ, would be forced to introduce similar tariffs in order to retain their customers. However, it can be observed that coherence of TEFCZ’s tariffs is much higher offering discounts to students and seniors, and also offering bundles with fixed internet. TEFCZ did a very good job keeping this campaign in secret and caught its competition unprepared which should result in an interesting number of net adds. Even so, many other customers will wait over the coming weeks to see the announced offers of TMCZ and VODCZ later this spring.<sup>10</sup>

What can be seen as one of the targets is the increase in ARPU that is so far constantly falling (Figure 9: Trend in ARPU, TEFCZ). Current TEFCZ’s ARPU is 388.5CZK (as to the end of 2012, -3.8% year to year) meaning that prices of both FREE O2 Plus and Free CZ amount over the ARPU. The idea is therefore that the customers who paid less so far will be willing to increase their spending to one of these tariffs if not having worry about their expenditures, resulting in upward pressure on ARPU.

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<sup>10</sup> This stresses out the extent of their surprise by TEFCZ’s move even more.



**Figure 9: Trend in ARPU, TEFCZ**

Source: TEFCZ

However, this strategic move also aimed at reducing the impact of the entry of 4<sup>th</sup> MNO (E15 2013). By decreasing the price level so significantly, TEFCZ made it difficult for the newcomer to earn an extra-normal profit by providing lower prices of voice and SMS. The limitation of the TEFCZ's new tariffs (as well as the other incumbents' responses) lays in data limits and data prices. However, in order to be able to address this issue fully by i.e. offering unlimited data plans, one has to dispose of powerful transport and access network which is something the new MNO does not have. However, as previously stressed out, TEFCZ, the one who broke loose, manages the largest access network no one else in the Czech Republic can match.

**To conclude** the current campaign of TEFCZ is a defensive campaign aimed at reducing two market threats, "Fourth mobile network operator" and "Decreasing ARPU" and improving one of its weaknesses, "Low loyalty and satisfaction of residential customer segment". The weakness is addressed through introduction of simple tariffs providing excellent value-for-money as the first operator on the market. The threat "Decreasing ARPU" is addressed through the pricing policy: all of the tariffs, except for the cheapest one, exceed the current average ARPU. TEFCZ's idea is that the customers will be willing to pay little more for less worrying about the invoice figure. Most importantly, by decreasing the price level, TEFCZ also addresses the threat "Fourth mobile network operator" by reducing the operational space of the new MNO by decreasing the voice and SMS margins. TEFCZ calculated well that the market potential now lays in data concerning offers where TEFCZ can exploit its huge inimitable-access-network advantage.



### 3.2.3.2 LTE Roll-Out

The LTE roll-outs is currently one of the hottest topics in the country as it is connected to the largest market opportunities on the Czech telecommunications market, “Demand for high speed mobile data“ and “LTE broadband mobile network frequencies auction “, as well as the largest threats, “Fourth mobile network operator” and “Unsuccessful auction of LTE frequencies resulting in loss of competitiveness in the mobile segment”.

TEFCZ’s SWOT analysis personalized for this strategy could be constructed as:

S: Capacity at the 1800MHz frequencies band

Unique access network

Low leverage

Image of First Mover and Innovator

W: Cannibalism (in terms of fixed and mobile services substitutability)

Low loyalty and satisfaction of residential customer segment

O: Demand for high speed mobile data

LTE broadband mobile network frequencies auction

T: Fourth mobile network operator

Unsuccessful auction of LTE frequencies resulting in loss of competitiveness in the mobile segment

TEFCZ is currently addressing the demand for high speed data through the fixed broadband market (VDSL, rDSLAMs etc.), but the future lays in the mobile segment’s 4G. The auction market opportunity presents the opportunity to obtain more advantageous spectrum for the LTE roll-out as 1800MHz owned by TEFCZ at the moment is not the most suitable frequency. But the auction can be also considered a threat as unsuccessful auction means worse conditions for the roll-out than the competition has and it would be more complicated and more financially challenging

to build a full-scale LTE network. Threat of a fourth MNO is one of the most serious threats the market has been facing in years as the new MNO is offered preferential position in the auction in terms of reserved 2x10MHz band in the most valuable 800MHz frequency spectrum.

### **ADVANCED ROLL-OUT**

TEFCZ, and TMCZ, has therefore decided for an advanced roll-out, an option it has due to the technological neutrality of its 1800MHz spectrum and free capacity at this spectrum, in aiming at preparation of a position and attraction of customers (and their subsequent signature of two year contract) before the main roll-out. TEFCZ has already launched first LTE sites in Jesenice (district Prague West) and OC Chodov (shopping mall in Prague) last June being the first one to the market and is about to play the role of first mover again by offering larger coverage by launching LTE in Prague and Brno this year.<sup>11</sup> The first mover position should help TEFCZ to gain a competitive advantage by offering it a head start with the most demanding customers residing in these large cities. TEFCZ is confident that the gains will overcome the increased costs as the 1800MHz is not the most suitable spectrum for the country wide coverage due to their short range reach (in other word – it would be very expensive as many more site would be needed)

TMCZ is pursuing a similar strategy (covered Mlada Boleslav in November 2012, larger launch this year) in contrast to VODCZ that has not announced the intention to follow these two. Most likely, VODCZ most likely do not have the necessary capacity to launch LTE in the large cities where the advanced roll-out makes economic sense.

## **MAIN ROLL-OUT PHASE**

### **OBLIGATIONS RESULTING FROM PARTICIPATION IN THE AUCTION**

As previously mentioned, the main phase of the LTE roll-out is interconnected with the auction as it provides the MNOs with the necessary spectrum. In attempt to

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<sup>11</sup> TEFCZ announced in a press release on 23<sup>rd</sup> April that LTE will be launched in Prague 1, Prague 2, Prague 4 and Prague 10 on May 15<sup>th</sup>. The Prague airport shall follow in the summer and the coverage of Brno shall start in October 2013.

exploit the auction not only financially but also in terms of competition, ČTÚ connected the entitlement to use the frequencies to multiple rules that could be split up into two groups: coverage and network provision.

The coverage rules can be view as conditions of both timing of coverage and so-called development criteria. These conditions differ slightly for the different frequencies and are the strictest for the most valuable 800MHz frequency band. In short, if TEFCZ manages to auction-off the wished 800MHz band, it will have cover<sup>12</sup> a region A<sup>13</sup> before it can start to cover region B (development criteria). Also, it will have 30 months to cover 95% of regions A and seven years to cover the entire country (timing criteria). TEFCZ, and any other successful bidder, will have a slight disadvantage compared to the newcomer as the newcomer is given additional 12 months to fulfill both of the criteria. In less successful scenario when TEFCZ auctions-off only 2x5MHz in 800MHz band, it would be exempted from the 30 months criteria and the A->B condition.

The network provision rules aim on efficient spectrum usage and competition development through the obligation of MNOs to provide national roaming and wholesale services. If TEFCZ auctions off at least 2x5MHz in 800MHz band, it will be obliged to provide access to national roaming (NR) for an appropriate price<sup>14</sup> to the new player on its 2G and 3G networks. If the TEFCZ auctions-off 2x10MHz, it must also provide access to its 4G network. However, in order to qualify for the NR, the new entrant must build its own network covering at least 20% of population of the Czech Republic. TEFCZ, or any other 2x10MHz owner, will not be then obliged to provide access to their 4G networks in the areas making out the necessary coverage. As to the wholesale services provision, in the next 14 years TEFCZ will have to

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<sup>12</sup> „Coverage“= 2Mbit/s connection for 95% of population with 85% indoor reception probability

<sup>13</sup> Regions A are 32 less densely inhabited regions of the Czech Republic (ČTÚ 2013) meaning that their coverage is therefore less profitable for the operators.

<sup>14</sup> Appropriate prices means price appropriate to the extent and nature of services that shall be provided through the access and the costs provider must spend in order to provide with the national roaming.

negotiate with potential MVNOs about access to TEFCZ's networks for appropriate price and are obliged to publish legally-binding referential offer for this access.

### **FINANCIAL PERSPECTIVE OF THE ROLL-OUT**

The financial costs of the LTE roll-out are enormous as both of its parts, the cost of auctioning the frequencies and the costs of the roll-out itself, reach billions of Czech crowns. The call prices of the 2x5MHz bands start at one billion of Czech crowns and the amount bided has to be paid in full shortly after the auction is over. In TEFCZ's situation, there are two options – the invoice for the auctioned-off bands is sent to the controlling company (TEF S.A.) or the TEFCZ has to take a loan as its reserves are not large enough. I believe, in this case the frequencies will have to be covered by the controlling company as the high leverage of the controlling company, one of TEFCZ's weaknesses as pointed out in the internal analysis section, is limiting TEFCZ's possibility to borrow. TEF S.A. most likely reserved a part of its gains from the German IPO to cover these costs.<sup>15</sup>

Second part of the expenses is connected to the actual network building and presents less pressuring issue than the license fees for the frequency bands. In contrast to the license fees, these expenses are spread over larger periods of time as the MNOs have seven years to provide with the full coverage and there is a possibility of saving part of both CAPEX and OPEX through the network sharing. This is important as the difficult financial situation of TEF S.A. combined with falling OIBDA margins puts a downward pressure on both CAPEX and OPEX.

### **NETWORK SHARING**

There are three main reasons indicating that TEFCZ will almost surely go forward with the idea of network sharing: timing of coverage, financial reasons and insufficient amount of 800MHz bands. The first two reasons, tight timing of coverage and financial reasons were described in the previous Main Roll-Out Phase sections but the third one, insufficient amount of 800MHz bands, was not mentioned before and requires more elaboration.

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<sup>15</sup> The timing of the German IPO (October 2012) exactly corresponds to the start of the first auction in the Czech Republic (November 2012).

There are only 2x30MHz available at the most lucrative 800MHz band out of which 2x10MHz is reserved for a new player. TEFCZ, as one of three incumbent operators, will fight over the remaining bands it needs 2x10MHz for comfortable operations. The same applies to TMCZ and VODCZ meaning that at least one of the current operators will be left with insufficient spectrum.<sup>16</sup> The new entrant might also attempt to auction an additional band in order to prepare better ground for the negotiations about the national roaming (two-way NR in this scenario) and network sharing. Question is whether it is a viable option due to the expected price of the band, the generous conditions of national roaming offered by ČTÚ to the new MNO for a ten year period, and the fact that one of the incumbents will come short of this crucial band or two will be left with band insufficient for comfortable operations. Indeed the operators can use the 1800MHz band for the LTE coverage, however, this would result in much higher cost for the operator due to the of higher cell sites density. The 2600MHz bands can be used for capacity support or coverage of cities with large traffic only due to the short reach of these frequencies.

These three factors put together will definitely lead to network sharing of some kind. TEFCZ is one of the two of the incumbents that already have experience with network sharing – TEFCZ and TMCZ joined together in a project called simply MORAN aiming at increased 3G coverage of the less profitable areas – and TEFCZ will most definitely wish to cash on this experience. The MORAN project took place in 2011/12 and split up the country in halves – TMCZ covered the western part whereas TEFCZ took care of the eastern part. MORAN, multi operator radio network, is an example of active sharing as it includes sharing the entire radio access infrastructure. It is the step #3 in the four-step ladder of sharing – site sharing (simply sharing the cell site), infrastructure sharing (included sharing of the ancillary equipment and backhaul), RAN sharing, and full integration (the MNOs could operate as MVNOs over a single common network). Sometimes, a fifth step, national roaming, is added.

The question is with which operator TEFCZ will choose to cooperate together during this roll-out. I believe that we are unlikely to see another coalition of TEFCZ and

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<sup>16</sup> Either one MNO does not obtain any 800MHz band or two of them will be left with only 2x5MHz.

TMCZ as these two are the closest competition and will take the LTE as an opportunity to differentiate them. We might see a close cooperation of PPF<sup>17</sup> and TEFCZ after all even though the buy-out did not go through. The third option is cooperation with VODCZ. As to the level of sharing, I believe that TEFCZ will stick to active sharing as it allows larger saving of both CAPEX and OPEX, and it is the kind of sharing TEFCZ has experience with. However, the exact stage will depend on the results of the auction for TEFCZ and its partner – successful auction will probably result in RAN sharing but if at least one of them ends up without sufficient spectrum full integration will be the obvious option. But in any case, there will be no more information about the possibility of network sharing until the auction is over as the negotiations are forbidden during the entire process.

### ***LTE ROLL-OUT OVERLAPSES***

The LTE roll-out will also influence other generations of mobile coverage (2G, 3G) currently run by TEFCZ as it simply does not make economic sense for TEFCZ to maintain all three types of networks. It adds up to keep two of them so they can compensate for each other in case of any issues. LTE offers high speed data but it is purely data network, it cannot transfer voice as such (the only option is VoLTE – VoIP for the LTE network). It can be well complemented with the 2G network that is suitable for voice (data on 2G, EDGE, are considered only a back-up option for mobile devices as the download speed is very limited) due to its country-wide coverage, much larger than in the case of the 3G network. Therefore, it is the 3G network that will most likely become obsolete and TEFCZ will gradually switch it off as the LTE network will be developing and the LTE supporting mobile devices will become more common.

In case of Telefónica, there is another aspect that has taken into consideration, the influence of the LTE roll-out on other, fixed services provided by the company, the so-called cannibalism. Currently, TEFCZ holds over four fifths of the xDSL market, market that will slowly disappear with the introduction of LTE. TEFCZ can cash in its position in next few years (the regions A has to be covered 30 months after the

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<sup>17</sup> Considering PPF the new entrant as no other company expressed so far the interest and the ability to participate in the auction.

auction has ended, the rest will follow fast). The expected time horizon is around five years if investments, such as into rDSLAMs aiming at increasing the download speed, are made due to several factors such as network construction, HW availability (mobile phones, tablets and modems) and replacement (mobile phones usually subject to replacement every two years or even after longer periods in case of mid-aged population), and/or the two-year commitment of current and future customers. In the meantime, TEFCZ can benefit from its current position and use the VDSL and rDSLAMs to attain current customers and attract new one until they can be, and are willing to be, migrated to LTE.

### ***LTE ROLL-OUT SUMMARY***

LTE roll-out is a more forward looking strategy than the "Free" tariffs campaign it follows. TEFCZ's approach can be split into two subsequent steps – advanced roll-out aiming at exploitation of the first mover advantage and the main roll-out phase.

The main roll-out phase is connected to very strict rules concerning the timing & coverage, national roaming, and wholesale; that TEFCZ, as the auction participant, will have to follow in the future. The tight limits increase the financial burden which will most definitely result in some level of network sharing as TEFCZ will attempt to decrease these high already elevated by the auction prices due to high leverage of the controlling company leading to cuts in both CAPEX and OPEX. Many speculations can be made about possible arrangements (pairs/level of sharing) but no information will be available until the auction is over as the negotiations are forbidden till then.

The LTE roll-out will also affect other parts of TEFCZ's business – 3G network will become obsolete as there will be no need for three different networks and 2G offers larger coverage; and fixed broadband. However, investments into FBB will help TEFCZ to cover the period between now and fully developed 4G network.

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## 4. Conclusion

The telecommunications market in the Czech Republic was always considered noncompetitive by both the general public and the industry regulator ČTÚ which resulted in a desire for a fourth mobile operator (MNO) that would change the current conditions. The general idea was that the entry of a new player will result in price wars due to the maturity and high saturation of the Czech market. ČTÚ therefore connected the entry of the new player to the auction of LTE broadband mobile network frequencies and set the auction rules in order to encourage a new entrant. Due to the inappropriate auction rules, the first auction had to be cancelled and the entry was postponed. However, new conditions and rules have been appointed and the auction should start for the second time in a close future and new player should enter the market in less than a year.

The goal of this thesis was to describe the conditions of the Czech telecommunications market before the entry of fourth MNO and the LTE roll-out from the strategic perspective of TEFCZ and also to include the precautions being taken by at the moment, such as the “O2” Free tariffs. In order to allow for the efficient use of the strategic concepts, it was necessary to summarize the basic concepts, principles and models related to the entire process of strategic planning. These topics were therefore covered in the first part of the thesis. Main stress was put on the analysis of competitive environment and strategy formulation as these create the underlying base of the actual description. The important analytical tool and models such as Porter’s Five Forces, SWOT or BCG matrix were covered in the corresponding sections.

Second part of the thesis focused on the Czech telecommunication industry itself and contains its analysis from the perspective of Telefónica Czech Republic (TEFCZ), the most complex player present on the market. Previously, the market was highly uncompetitive due to low threat of entry (barriers to entry were high), weak bargaining power of buyers and suppliers, and stable competitive environment; that, together, overcame the high substitutability of the services. However, as threat of the entry increased and became more of a reality, TEFCZ broke up the “collusive



oligopoly” and the long-awaited price wars started. This trend can be expected to continue or even speed up with the actual entry of the new MNO.

The analysis of the competitive environment was followed by an internal analysis of TEFCZ representing the weakest link of the entire analysis as it had to be prepared from publically known information due to the high sensitivity of the actual analysis (business secret). One of TEFCZ’s strengths is the free capacity at 1800MHz, a crucial element of the advanced LTE roll-out. On the other hand, TEFCZ is limited by the high leverage of its controlling company, TEF S.A. This weakness points out the importance of corporate level analysis and stress out the necessity to consider the corporation set boundaries and not only the business-level SWOT analysis.

The last section summarizes the strategic implications of/for the LTE roll-out, including current precautions such as Free O2 tariffs. The precautions aim at reducing the operational space of the new MNO and its incentives to enter. The TEFCZ’s advanced LTE roll-out at currently available spectrum aiming at attracting and locking-in both new and current customers also represents such precautionary move. As to the main phase of the LTE roll-out, ČTÚ wishes to use the spectrum auction to promote efficient use of spectrum and increase the competition. Therefore, multiple rules conditioning the access to spectrum, such as coverage timing limits and network provision, were set. These rules combined with the financial burden of the roll-out will most definitely lead to some level of network sharing as TEFCZ will wish to cash on its experience with network sharing and reduce CAPEX and OPEX costs. However, no more information will be available until the auction is over as the negotiations are forbidden during the entire process.

In a few years’ time, it would be very interesting to make the comparison of the pre-auction and post-auction environment, both in general and with respect to the change of TEFCZ’s position on the market. There is also the possibility to compare the auction results in terms of increased competition and efficient spectrum use intended by ČTÚ and the post-auction reality. Another possible extension would be to analyze how well the new entrant managed to exploit the preferential conditions it was provided by ČTÚ.

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