AN ANALYSIS OF THE INITIATION OF AN INDEPENDENT REGULATOR OF

NATURAL MONOPOLIES IN THE REPUBLIC OF KAZAKHSTAN

By

Saule Arykbayeva

THESIS

Submitted to
KDI School of Public Policy and Management
in partial fulfillment of the requirements
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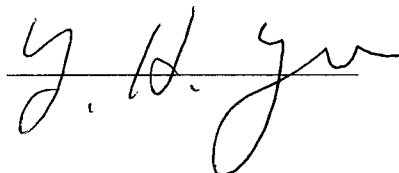
MASTER OF PUBLIC POLICY

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ABSTRACT

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According to the Address of the President of Kazakhstan to the People of Kazakhstan 2007 "New Kazakhstan in a new world" one of the key targets for the Government is reducing spheres of natural monopolies as much as possible. This can be implemented by the initiation of new independent sectoral authorities (regulators) for typical branches with natural monopolies such as the telecommunications sector, railways and ports, energetic, oil and gas pipeline transfers, housing and communal services for tariff and technical regulation. Research question for given study is how effective and successful implementation of new regulatory policy for liberalization of telecommunication industry was and what should be changed in order to make it more applicable in conditions of Kazakhstani economy. The study was based on data collection and analysis, including a literature review, analysis of government documentation, and interviews. The initiation of an independent authority to control and regulate monopolistic actions aimed at competition promotion as well as investment attraction has a chance to succeed if there is common purposive movement from all participants. Therefore, satisfying some specific conditions in addition to basic international regulatory principles might be a solid ground for a new authority operating as a valid legitimate independent regulator.

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CHAPTER 1. INTRODUCTION

1.1 Background

According to the Address of the President of Kazakhstan to the People of Kazakhstan 2007 "New Kazakhstan in new world" one of the key targets for the Government is reducing spheres of natural monopolies as much as possible. This can be implemented by the initiation of new independent sectoral authorities (regulators) for typical branches with natural monopolies such as the telecommunications sector, railways and ports, energetics, oil and gas pipeline transfers, housing and communal services for tariff and technical regulation.

It had been supposed for many decades that natural monopolies should be regulated by the state, based mainly on principles of direct control while using mechanisms of price and non-price regulation. However, this creates low efficiency of natural monopolies operations, weak susceptibility to innovations, and deterioration of given services.

All these reasons led to implementation of structural reforms in developed countries which have borne the most acute problems in this sphere. It includes, first of all, a discrepancy between old methods of state regulation and new problems which arise nowadays in natural monopoly spheres.

The aim of creating independent sectoral regulators is to ensure effective and balanced development with improving of investment climate in different branches of economy. The main principles of functioning for the given structures are independence, financial and functional autonomy, accountability, transparency, predictability and consistency. It is highly important to Kazakhstan's economy to create the new regulation regime which is independent and enjoys confidence of consumers, investors and government. The regulator shouldn't depend on interested parties.

This study was designed to analyze the current system of natural monopolies' regulation in Kazakhstan in order to detect problems and weaknesses with defining effective

state arrangements for creating a new regulatory structure to develop competition in the market and achieve balanced economic development. The project examined the possible problems and solutions in adopting new regulatory regime in Kazakhstan based on international experience. Creating new regulative authority in the telecommunication sector was analyzed as a concrete example of new policy implementation.

1.2 Prior studies on natural monopoly regulation (in telecommunications sector) in transition economies and significance of study.

In transition economies regulation of natural monopolies is implemented based on existed global experience and specific features of certain socioeconomic system. Novikov and Zhavoronkov in their research analyze features of economic growth in Russia for 2000-2007 with focusing on legislative aspects of regulation (Novikov V., Zhavoronkov S., 2008). They mention that Russian regulatory system hasn't had clearly structured policy in reforming of natural monopolies sector even though some efforts in reality had succeed.

Reforming was aimed at restructuring of branches in order to separate natural monopolies and potentially competitive branches with maintaining of technological integrity, creating fair conditions in terms of taxation and tariff defining, etc. These actions had supposed to have final goal to create favorable conditions for the further divest of monopolization in industries and develop the infrastructure.

However, as authors emphasize, most of given goals and problems still are remained actual. Nowadays another approach in state regulation is broadly used as partnership of state and private sector which is supported by various state preferences and amendments to the legal norms. In authors' opinion, this method is the most effective and will allow achieving balanced development of strategically important industries as well as to attract investment and improve the quality of offered services.

Another Russian scholar Efanov states that regulatory environment reforming in complex with technological changes is remained the main factor for the development of telecommunications sector. The basic directions should be: structural changes in industry, connecting of operators' network, tariff regulation for the final-consumers, providing of social services, unrestricted access for the foreign investment and allocation of frequency spectrum with favorable conditions for the innovations' creating and applying. Based on analysis of Russian telecommunications market author supposes initiation of independent regulatory agency with functions aimed at reduction of administrative barriers for the new participants, changes in licensing in order to cut useless requirements, transparency in process on frequency spectrum allocating, etc.

One of the specific features offered by Efanov is a new technique on estimation of licensing cost for the telecommunications services that gives comparative analysis to select the most economically rational project, particularly for the mobile services. Given method relied on GDP per capita in countries and could be used in all tender with auction for the license issue. According to Efanov, this aspect is the basic in process of fair competition and dynamic development of telecommunications industry.

Kagramanzade (Kagramanzade, 2005) in researching of CIS countries' telecommunications market also emphasizes the necessity of independent regulator for the industry as well as liberalization of market as cardinal conditions for the innovative management. Independent regulatory institution is the vital element in innovative development of industry that coordinates functioning of the whole branch without interruption in process of technical operation. Author notes that independent regulator, particularly, must implement the privatization of telecommunications sector with structural reforms in order to comply with public and private interests. Realization of consistent and effective policy of liberalization in natural monopolies has been supposed to present the main

challenge and goal for all CIS region due to long-lasting absence of competition in Soviet Union period.

Kazakh scholars Hasenov and Malishevskyi from National Telecommunication Association had examined current situation at the telecommunications service market with analysis of regulative legislation. They conclude the dominant position of incumbent "KazakhTelecom" is still decelerating the realization of market principles and making obstacles in terms of fair access to resources. Therefore, successful liberalization process will depend on efficient regulation of monopolist actions as well as attractions of new investors and innovative technologies.

Authors point out that functioning Kazakhstan's law on Communications requires changes, respectively, aimed at fair distribution of telecommunications network and developing rules on leasing of telecommunication infrastructure in order to give equal opportunities for the newcomers. In terms of regulatory authorities National Commission on Communications Regulation should be founded for the telecommunications regulation while Independent Regulatory Agency will control the whole communications sector. According to scholars, at least mentioned conditions should be followed to develop competitive environment and promote telecommunications industry.

Research of European Bank of Reconstruction and Development in Kazakhstan's telecommunications market shows the lack of necessary modernized equipment and undeveloped business climate as braking forces for the sustainable development. Experts mention that the main goal for current period consists in attraction of investments and free competition promotion that will stimulate economic growth as well. Full liberalization of industry with using non-discriminative approach in terms of frequency spectrum distribution and universal access services relied on legislative improvement are supposed to be the key steps on the way of achieving given goals.

Since process of effective regulation of liberalization and telecommunications industry is still critical issue and one of the key targets for the Kazakhstan's long-term economic policy it is necessary to define concrete obstacles and advantages of existing system with evaluation of implemented arrangements. This study helps to identify weaknesses of telecommunications regulation in Kazakhstan and formulate the appropriate methods of fair regulation by creating an independent authority in telecommunications sector. Described model presents the special model of independent regulator's functioning for developing countries based on global experience with taking into account features of national economic system. Examining of specific features and arising problems with possible decisions in given study will help to overcome further challenges without dead losses and contributes to the description of international practice. Finally, given research extends the previous studies of natural monopoly regulation and could be used as applicable in conditions of emerging economy.

1.3 Hypothesis and methodology

The project analyzed existing system of regulation and control spheres of natural monopolies in Kazakhstan, identified its weaknesses and was aimed at finding appropriate and effective solutions for initiation new independent sectoral regulators with concentration on telecommunications sector.

Research question for given study is how effective and successful implementation of new regulatory policy for liberalization of telecommunication industry was and what should be changed in order to make it more applicable in conditions of Kazakhstani economy.

It is hypothesized that policy designed by government hadn't been really consistent and needs in clearly defined organizing of interaction between involved authorities with concrete meaningful steps to make it operated in reality. Given study covers analysis of already

undertaken measures as well as trial to detect reasons of failure and offers some solutions with methods of reforming.

The general objective of given research is defining weaknesses in regulatory policy in telecommunications sector in order to solve existing problems and designing effective policy directions to adopt it successfully.

The specific objectives could be formulated as following:

> examining of arrangements undertaken by government in terms of regulatory policy;

> evaluation of results and affects of implemented measures in telecommunications;

> defining potential for the new regulatory authority functioning and its basic characteristics;

> detection of hidden weaknesses and specific features that led to failures in implementation process;

> formulation of recommendations to organize independent competent regulator's functioning.

In order to achieve the assigned objectives, the following work was carried out. First of all, the study will be based on data collection and analysis, including a literature review, analysis of government documentation, and interviews.

For collecting the data for this research the following techniques were used:

- A comprehensive literature review was conducted to get thorough theoretical knowledge on principles of natural monopolies' regulation system;

- Official government documents, such as manuals, procedures of the Ministry of Economy and Budget Planning and all regulatory legislative base accepted by the President of

Kazakhstan for the last few years were examined to clearly understand existing structure and functioning system of country's regulation process;

- Questionnaires were distributed and interviews conducted among specialists and experts of state regulatory agencies (including state agencies of informatization and communications) will help to assess weaknesses and failures in the existing regulative system;

After data collection was finished, the next stage of research included analyzing the available information in order to detect problems in existing regulative process of the country, especially in the communications sector, and comparing to an inspection of world experience in initiation of independent regulators in order to use it in conditions of Kazakhstani economy.

After that, possible ways of effective solutions were identified, particularly:

- necessary state activities for creating new regulator and favorable conditions of its functioning in terms of legislative, economic and political changes;
- defining structure, price and tariffs regulation policy, financial support and principles of personnel policy for new regulator's activities.

The next action will consist in creating further recommendations for effective and objective regulator's functioning in order to realize the main aims such as state price and tariffs regulation concerning sectoral subjects, ensuring of unimpeded and nondiscriminatory access to infrastructure and services of natural monopolies' subjects, analysis of commodity markets, licensing of subjects, price and market monitoring for market development, and adjustment of disputes.

The analysis carried out relied on the Report of European Bank of Reconstruction and Development (EBRD) about regulation development in telecommunications sphere in the Republic of Kazakhstan (2006). According to the given report EBRD supposed to adapt framework of regulatory process already used for transition economies (Baltics, Balkans and some East Asian countries). However, until now there is no effective functioning regulatory

regime in Kazakhstan due to some peculiarities of national economic system and external affects. Therefore, the last chapters of given thesis will be focused on identification of obstacles and solutions in regulatory policy in the light of EBRD's developed recommendations.

1.4 Structure of the paper

Presented research consists of five chapters with separate section assigned for conclusions and recommendations.

First chapter presents the background of the researched issue with description of the prior studies and contribution of given thesis. It covers findings of different scholars in sphere of telecommunications regulation in CIS region. Hypothesis and methodology section include goals and research questions as well as methods and strategies of research to achieve specific objectives.

Second chapter gives explanations in theoretical background of natural monopolies and covers various theories on natural monopolies regulation since nineteenth century until modern studies. This part also analyses existing regulatory system in Kazakhstan with reflecting weaknesses and problems in policy implementation.

Third chapter provides comprehensive information in terms of global experience of natural monopolies regulation and possible lessons for Kazakhstani policy to adoption. Based on examined international practice this chapter throws light upon applicable methods of effective regulation in conditions of developing economy.

Fourth chapter defines the necessary conditions for effective regulatory policy designing and prerequisites for initiation of independent authority. Analysis includes supposed reforms in legislative base, structural changes and management principles for the new agency as a whole and, particularly, for the Kazakhstani system.

Finally, fifth chapter describes tentative policy directions with defining main financial sources, responsibilities and limitations for the new authority in order to get real independence and fairness in regulation. Personnel policy and human resources management are also included in this section as critical elements in effective functioning of new agency. Another section of chapter examines change management which covers possible ways of conflict resolution and resistance management in case of counteraction and negative reactions of stakeholders.

Last section provides conclusions and recommendations for the creation of new authority as well as possible ways for the further functioning.

CHAPTER 2. REGULATION OF NATURAL MONOPOLIES, SUPPORT AND PROTECTION OF COMPETITION: THEORY AND PRACTICE

2.1 Classic theory in terms of regulation of natural monopoly: benefits and disadvantages

Literature review

Natural monopolies play the leading role in maintaining the sustainable development of national economic systems in the modern economy. Natural monopoly branches as energetics, transport industry, telecommunications, oil and gas sectors not only contribute considerably to GDP growth, but also have great importance for solving the main social problems.

At the same time, there exists a distinct problem of regulation of natural monopolies and "procedures that cause these industries to operate in a desirable way" (W. Nicholson, 2005). This has been a great matter in controversy for many theorists for centuries.

Natural monopolies regulation issue has been studied in different scholars' paradigms as Cournot, Mill, Marx, Walras, Marshall, Robinson, and Friedman's theories. These economists paid great attention to the monopoly problem per se. Some of them detected negative consequences of monopoly existence and justified the necessity of struggle against monopolies through the state regulation mechanisms. (Zvereva U.N, 1998)

On the opposing side, Marx and Lenin in their studies considered monopolies as components of competition and tool of liberation from capitalism [In practical life we find not only competition, monopoly and the antagonism between them, but also the synthesis of the two, which is not a formula, but a movement. If the monopolists restrict their mutual competition by means of partial associations, competition increases among the workers; and

the more the mass of the proletariat grows as against the monopolists of one nation, the more desperate competition becomes between the monopolists of different nations] (Marx, 1969)

The theory of institutionalism created a basis for government intervention in economic laws, including natural monopolies regulation, while theories of welfare economics (Pareto, Hicks, Kaldor and others) stated monopolies were a reason of economic inefficiency (Usher, 1992) and tried to define mechanisms of price and consumer surplus regulation in the monopolistic market (Zvereva U.N, 1998).

Modern theoretical approaches to natural monopolies regulation problem were developed by Baumol (George, Joll, & Lynk, 1992), R. H. Coase (Kapelusnikov), Braeutigam, Stigler, Laffont and others. They suggested new forms and methods of regulation in order to reduce government failures in natural monopoly industries because "regulation of "natural monopolies" (industries, usually utilities, in which the market can support only one firm at the most efficient size of operation) has mitigated some monopoly power but usually introduces serious inefficiencies in the design and operation of such utilities" (Stigler, 2008).

On the other hand, DiLorenzo pointed out that natural monopolies are "caused by government intervention" and "created by the failure of governments to put a price on scarce urban resources" (DiLorenzo, 1996).

Thus, as mentioned above, there is still no direct answer to question of the most effective method in regulation of natural monopolies. Some of modern theoretical studies are examined more detailed in the following paragraphs.

The study of regulatory institutions design by Jean-Jacques Laffont (2005) examines arguments supporting and criticizing state intervention in the process of natural monopolies regulation. The most important reasons in favor of decentralization are the degree of differentiation which takes into account local peculiarities and preferences, higher degree of

credibility for local information, conditions for creative competition between local regulators, less government expenditures for local authorities in comparison with the foundation of a federal controlling agency with dozens of functions. On the other hand, such evidences as more reliable national expertise which provides consumers by authentic information, control of resources' allocation and smaller "risk of political and industry capture" prove the necessity of central regulation.

In terms of making the choice between creating specific or multisectoral regulatory agency Laffont contrasts "bounded rationality" and stimulating of incentives for regulators (in the case of specific agencies) with coordinated guidance and more rational use of limited resources (for multisectoral agencies). The character of the given industry also forms regulation policy, as according to Laffont, telecommunications, railways or gas transportation industry operate more effectively in the case of centralized state regulation, while water and electricity distribution at the local level require local regulation. Nonetheless, Laffront concludes that the final decision should be based on specificities of institutional framework, development level, structure of economy and regulatory capabilities of definite country.

Paul Joscow (2005) claims that regulatory institutions results depend on the methods of policy realization, whether they are licensing, regime, or franchising. The guarantee of success is also dependent on an information symmetry, in order to make objective expertise "in areas such as engineering, accounting, finance, and economics".

S. Ran Kim and A. Horn (1999) in their research mark out necessary prerequisites for the national regulation policy. It requires competent but non-conservative actions to change old rules and create new environment based on real economic conditions. The main issues in monopoly regulation is right choice of model of monopoly pricing (the price-based or the cost-based regulation) and method of government intervention (subsidies or tax preferences, etc.) resulted from clearly defined goals of reform.

These authors mention that various types of regulation should be adopted depending on the field and its evolution stage, as "detailed a priori regulation is better suited to relatively stable, technologically mature, and monopolistic sectors, such as water, than to sectors undergoing rapid technological evolution, such as telecommunications." (Kim, Horn, 1999) Therefore, monopoly regulation should be a reflection of national economic system with its features and conditions.

Classical microeconomics theory implies that natural monopoly should be regulated through the economic mechanisms as price regulation and incentive regulation "to provide the firm with the motivation to behave more consistently with regard to the social optimum". However, alternative regulation tools, including the theory of contestable markets, entry regulation and auction with public ownership could be also used for effective control.

"Half a century ago, government ownership of firms was thought of as the key solution to market imperfections, such as monopoly", Ben W.F. Depoorter (2005) notes. Nevertheless, Depoorter maintains that the monopoly regulation theory is weak, relying on arguments of budget constraints and lack of innovations. These positions are critical for technological development and overweigh all advantages of public ownership in natural monopolies functioning. Thus, comparing two methods of regulation, the scholar returns to the indisputability of liberalization in regulation of monopolies.

E. Markova (2009) emphasizes the role of independent regulatory bodies in developing and transition economies to regulate monopolies. As a foundation for regulators, the government should divide power between courts and regulatory tribunal for legislative regulation with defining local or national status of regulator. However, compliance with all requirements of independent regulators is difficult, especially, in developing economies due to "bureaucratic inefficiency, private corruption and scarce human resources".
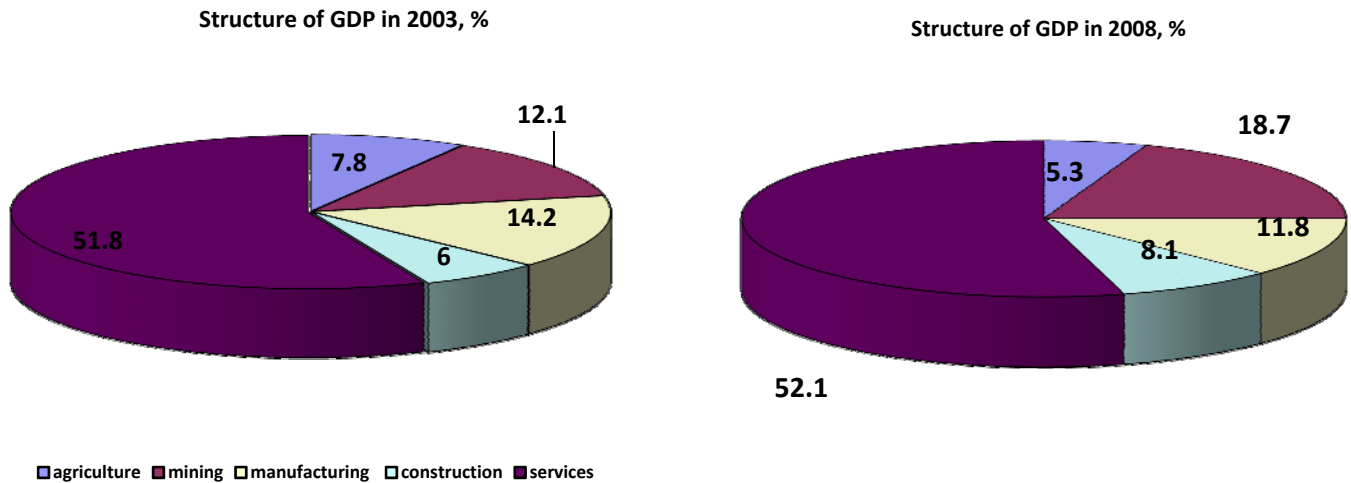
V. Akulov (2002) expresses a skeptical opinion about the creation of national regulator of natural monopolies in developing countries caused by threat of unfair distribution and corruption. Therefore, this type of regulation wouldn't be effective unless great changes in economic and social environment happen.

In summary, it should be emphasized that although many scholars advance various tools of regulation, all agreed on the importance of prudent regulation, as otherwise there would be negative economic and social consequences. Competent regulation of natural monopolies should take into account all aspects of national economic system, structure, institutional basis, regulatory peculiarities, and even national mentality to avoid corruption and bring prosperity instead of unfair distribution.

Adoption of different mechanisms, particularly in developing economies, becomes more complicated due to structural imperfections and inconsistency of regulation. Thus, a shift to effective regulation is a broad and challenging process requiring, first of all, adequate policy designing and concrete purposeful steps to separate the functions of economic agents.

2.2   System of natural monopolies' regulation in the Republic of Kazakhstan and main barriers in the way of effective regulation

The state economic policy of Kazakhstan for the period until 2015 is aimed at achievement of a sustainable development of the country through diversification of economy and removal from mining to manufacturing industry. Manufacturing of competitive and export-oriented goods and services with promotion of service sector are the main subjects of state industrial-innovative strategy in consequence of existing negative tendency of increasing share of mining in GDP production.

Structure of GDP in 2003, %

Structure of GDP in 2008, %

□ agriculture ■ mining □ manufacturing □ construction ■ services

Source: The Agency of Statistics of The Republic of Kazakhstan, main indicators for 2003-2008

However, in the way of compliance with international standards, the economy of Kazakhstan meets a number of problems. The main problems include the following: a raw materials orientation, low integration with world economy, weak intersectoral and interregional economic integration, a low consumer demand for the goods and services at domestic market (small economy), backwardness of an industrial and social infrastructure, the general low level of technical and technological development of the enterprises, absence of effective communication between science and manufacture, low expenditures on research and development, management discrepancy to problems of economy adaptation to processes of globalisation and principles of service-technological economy.

Now Kazakhstan is becoming more attractive for foreign investors. So, in comparison with 1999 when the quantity of the enterprises with participation of the foreign capital was presented by 2000 firms, in 2003 their quantity has grown to 6500, and this indicator has already made 7700 in 2006 (Agency on Staistics of the Republic of Kazakhstan). At the same time, in order to create favorable conditions for domestic and foreign investors, the perfection of legislative basis and economic structure is necessary. Further development of financial market with improvement of fiscal, educational, antimonopoly and infrastructural policy will be tools to achieve formulated goals. Therefore, successful economic development requires

institutional strengthening of antimonopoly authority as one of the instruments of state strategy.

At the present time, one of the weaknesses of existing competition regulation and antimonopoly policy is institutional fragility of regulatory authority resulted in blurring of functions and focusing on minor issues as price and tariff control only with losing competition regulatory functions. Effective economic policy targets are realized by the Agency on Regulation of Natural Monopolies (further - Agency) through force of improvement regulation system and control over more than 900 subjects of natural monopolies according to the republican and local sections of natural monopoly subjects' Public Register. More than 80% of all natural monopolies subjects in Kazakhstan function in sphere of sewerage system, electric and heat and power engineering. Agency's regulated share at this moment equals 100% in heat and water supply, 46% in railways, 33-35% in sphere of power engineering, 17-18% in gas supply and less than 2% in telecommunications sector[1]. Based on the Ministry of Economy and Budget Planning of Kazakhstan's estimation, in 2007 the summarized share of natural monopolies' products presented 9,7% in basket of goods' structure, the largest contribution in consumption made heat and water supply which equal 4,2% and 4% respectively.

However, the functions of the existing Agency don't include real activities in order to provide effective development of natural monopoly subjects, promote competition, and restrict monopolistic operations.

On the other hand, the key restriction for most subjects' functioning remains a lack of investment in upgrading of capital stock which could be solved by attraction of new investment inflows, either domestic or foreign. Effective regulation should push forward economic sectors by attracting participants and creating reliable environment for long-term

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[1] Report of the Ministry of Economy and Budget Planning of the Republic of Kazakhstan, 2007

capital investment. It is well-known that capital investment inflow becomes more challenging in the absence of any protecting mechanisms for investors. The lack of a stable investment climate reflects in the increasing of prices to ensure a return on investment and, as a result, affects on all consumers.

These issues sometimes could conflict with each other because a high rate of return might lead to high tariffs for consumers or ineffective investment. In contrast, tight tariff regulation of natural monopolies' subjects could result in lowering quality, service level and capital stocks' deficit, which are also negative factors for system development.

All the above mentioned questions emphasize the necessity of balanced activities to attract adequate investment and set the appropriate price level. Therefore, the functioning of new sectoral regulator of natural monopolies should concentrate on setting clear standards of planning while taking into account nature-conservative factors and providing reliable guarantees for investors operating to achieve those standards.

Table 1. Current situation in telecommunications industry

#	Indicator	Plan for 2009	Fact of 2009	Plan for 2010
1.	Fixed communication subscribers' density In rural area	24 subscribers per 100 citizens 12 subscribers per 100 citizens	24 subscribers per 100 citizens 13 subscribers per 100 citizens	25 subscribers per 100 citizens 13 subscribers per 100 citizens
2	Mobile network subscribers' density	105 subscribers per 100 citizens	95,5 subscribers per 100 citizens	110 subscribers per 100 citizens
3	Internet users' density: High-speed access dial-up line moving constraint	20 users per 100 citizens 5 users per 100 citizens	32 users per 100 citizens 8.7 users per 100 citizens 433 418 users 3 314 134 users	23 users per 100 citizens 10 users per 100 citizens

Source: The Agency of Statistics of The Republic of Kazakhstan, indicators of telecommunication industry in 2009

CHAPTER 3. GLOBAL EXPERIENCE IN INITIATION OF INDEPENDENT SECTORAL REGULATORS OF NATURAL MONOPOLIES

3.1. International experience

International experience shows that carrying out policies aimed at identifying an optimal model of reforming natural monopolies can be mutually beneficial for the government and private sector mechanism of regulation. The majority of examined studies analyze principles of building regimes in order to develop competition as well as a system of separation of powers between the government and market participants.

Before examining studies, it should be mentioned that all scholars emphasize the substantial role of regulation for a country's economic development from their evaluation of results of implemented reforms in developed and developing countries all over the world.

The experience of developed countries

Cave and Crandall (2001) in their research analyze the disadvantages of telecommunications policy reform, including liberalization of the telecommunications market, in North America and European Union. A policy of liberalization **in Canada** was realized through the gradual changes in decreasing barriers to entry and providing equal conditions for participants without elimination of incumbents. Canadian experience verifies that divestiture of existing telecommunication operators (former monopolists or duopolists in the market) isn't necessary to succeed in liberalization of the telecommunications sector for promoting competition in the long distance and local services. Additional obstacles in the way of telecommunications development have arisen, as a result from the US' separation of local and long distance market policy with vertical divestiture of incumbents.

Using existing telecommunications networks (both local and long distance) under equal access creates a basis for expanding market and ensures a favourable environment for

competition. This principle was learnt "from a critical US error – the failure of regulators to mandate equal access to local switches" and made it possible to achieve the same level of competition in the Canadian TC market that the USA achieved in a longer period of time. As a whole, when comparing US and Canadian cases, the authors note the less regulative character of reform in Canada that became the effective tool to promote a competitive climate in the market. The authors emphasise that US legislation is still having shortcomings due to a conservative policy with various restraints for the telecommunications industry.

The process of liberalization of telecommunications **in Western Europe**, according to Cave and Crandall (2001), as a whole can be defined as effective and achieved its goal to promote a competitive climate even though some major European telecom operators were mostly controlled by the state (cases of France, Austria, Finland, Denmark). "There are now 460 telecom operators in Europe (March, 2000). Between 1998 and 2000 the total telecom services market grew an estimated 12.6 %, to 161 billion euros". This was the result of wise legislative approaches to divide functions and responsibilities between state and national regulatory authorities based on existing frameworks with clearly defined proscriptions for monopolistic actions.

However, in the European case, again, a problem lies in the implementation procedures of competent policy. One of the main obstructions was the complexity of legislative system with different standards in telecommunications, particularly, the discrepancy of licensing rules between a few countries that could be solved by "achievement of harmonization by adopting a common set of requirements based on the procedures of member states operating a light-touch regime, or the introduction of a one-stop shopping regime". The mentioned regimes imply that the license of one EU member should be valid throughout the whole territory of EU.

An effective strategy for liberalization process based on these examples, in the judgment

of the authors, should include mandatory functions of regulatory authority such as "control of retail prices, control of access prices and universal service obligation". The given experience could have practical importance for conducting projects in terms of legislative changes required to liberalize the market and have an impact on real situation. They also provide important consequences of contradiction between policy design and policy implementation, and thus give the necessary steps to ensure a framework for market liberalization that can be evaluated based on US, EU and Canadian examples.

Pitman (2005) in his research analyses results and consequences of adopting new regulatory regimes in countries of **Central and Eastern Europe** after the crash of the Soviet Union. Hestates counterpoints about the utility of government intervention in competitive regulation, noting the political and economic vulnerability in case of strict antimonopoly regulation. His critique relies on arguments that antimonopoly legislation creates a basis for machinations with price-setting and unreasonable pressure to private business. Choice of balanced regulation policy is a critical issue for the government, otherwise it will be destructive for ordinary citizens and the economy as a whole.

Eastern Europe practices over 5 years (from 1996 till 2001) show that regulatory authorities realize their responsibilities only by force of judicial inquiry. It detects a problem of the lack of efficient tools to prevent monopolistic behavior in the market. By examining Eastern European experience in terms of effectiveness of undertaken steps, Pitman also makes conclusions about insufficient use of legislation in the given region caused by political narrow-mindedness in aspects of regulatory policy. He reveals that correct competition laws, in the opposite side, could stimulate competition in case of more competent using.

The experience of the **United Kingdom** studied by Spiller and Vogelsang (1996) in the telecommunications industry demonstrates a positive picture due to developed and well-organized judicial structure and promotion of "limited competition". The aforesaid implies

the strong system of licensing, upholding contracts and property rights to regulate price-setting and ensure a favourable climate for investors. The balanced division of power between Department of Trade and Industry and "Monopolies and Mergers Commission" with "diffused ownership structure" of British Telecom intensifies the independence and transparency of regulation.

At the same time, according to the scholars' opinion, the UK system has defects, namely the prevailing power of the government to change legislative basis in terms of licensing process and low level of flexibility to react in case of structural changes. Therefore, the British traditional stable system in these conditions is a double-edged weapon which is both a helpful and harmful tool for promotion of competition. As a conclusion, the authors note that the given structure could be adopted successfully in countries where "courts have a tradition of upholding contracts" to protect investors' rights.

Laffont (2005) analyses the experience of developed countries with LDC' regulatory system to make evaluation of appropriate regulation tactics.

The **New Zealand** system of regulation has already had a feeble attempt of industry's self-regulation that resulted in the adoption by government of some specific regulatory mechanisms. These tools have the aim to prevent abuse of the dominant position or some unfair actions with impact on competition in the market. Steps undertaken before showed the lack of competitive climate in New Zealand's economy. Industries are still in a transition period from monopoly to competition, thus, regulation policy includes the considerable share of state control even though it has a well developed legislative base.

In Australia "multisectoral and multi-functional competition" regulation is brought into effect by various agencies with the dominating power of the Australian Competition and Consumer Commission (ACCC). In the telecommunications industry, particularly, Australian Communications Authority (ACA) is responsible for technical issues. Laffont mentions that

Australian regulation in terms of institutional structure is more independent from the government, which makes it more flexible. The feature of this regulation is balanced distribution of functions between associations to solve access issues, technical operations and consumption needs.

The experience of developing countries

Regulation of monopolies in small developing countries is mostly characterized as multisectoral dictated by financial reasons to save scarce budget resources.

In the **Bolivian** regulatory structure, functioning of "sector-specific branches under the supervision of a coordination entity" creates favourable conditions for sectoral development. The disadvantage in this case is only the risk of "political interference" that reduces attractiveness for potential investors.

Problems that the **Mexican** government faced in process of regulation included lack of adequate institutional frameworks to allocate resources effectively, inconsistency of local and federal government's arrangements, and risk of capture by the industry. In the telecommunications industry formal privatization of market took place in 1990, but after ten years there was the same informal monopolist in providing telecommunications services. Mexican government explains this situation by "fear of negative impact on the stock market in case of too severe regulation".

Spiller and Sampson (1996), in the process of researching the regulation type **in Jamaica,** highlight the well-developed independent judiciary system with high-level protection of property rights that cover licencing regime, price-setting methods and "automatic arbitration procedures" in case of disagreements. All these steps stimulated flow of private investments to most of all telecommunications branches and competition development. However, long-distance telecommunications sector in Jamaica has braking

forces resulting from entry barriers due to high costs for providing this type of services. The authors suppose that the more "careful design of regulatory institutions" would be pushing mechanism for promoting competitiveness in Jamaica's economic sectors.

The **Chilean** evolution process of regulation, described by Galal (1996), depended on economic and technological prerequisites until 1980 when the telecommunications sector became a profitable industry for the new business class. The keystone to success in Chile was equitable and reliable principles of functioning along with ensuring more liberal conditions for private sectors. The government sacrificed on reducing of transaction costs in order to increase efficiency of industry that enhanced interaction between government and market participants. Based on learned experience, the author points out the importance of a stable political system and a fair judiciary for founding a productive regulatory system especially in the telecommunications industry. Effective cooperation of public and private sectors is possible only on the basis of consistent incentives for private sector. Some principles of Chilean tactics could be applied practically in Kazakhstan's regulatory system taking into account similar conditions and government initiatives to attract business while in the process of regulation.

The regulation of "Telecommunications **in Philippines**", described by Hadi Salehi Esfahani (1996), becomes complicated caused by ruling of a small elite group over all industries. Weak and unstable political structure forms an ineffective skewed economic system with rare idle efforts to liberalize the economy.

In the telecommunications industry, regulation was characterized by slight attempts of privatizing industry to eliminate the monopoly of the Philippines Long-Distance Telephony (PLDT) by force of mechanissm of franchising. However, it led to formal changes in industry due to the manipulations of PLDT to avoid losing power. As a result, holders and top managers of PLDT became holders of small firms – and thus new participants in the

telecommunications market.

Esfahani concedes that successful development of Philippines' telecommunications and economy as a whole could be achieved in cooperation with international organizations by using more sophisticated methods to control management. Government arrangements to increase independence and transparency of regulatory authority, incentive to reduce barriers and attract investors, strengthening of judiciary relied on financial and political support of international institutions will be drivers of effective regulation process, in Esfahani's opinion. This study emphasizes the necessity of prerequisites and conditions for quality implementation of regulation reforms.

Hill and Abdala (1996) describe the experience of **Argentina** which has definite division of powers to regulate electricity, gas and telecommunications industries. Electricity and gas regulative authorities have "autonomous funding and skilled staff, accountable both to executive and legislative branches". In the telecommunications industry, results are not so impressive because of inconsistency in policy between two national regulators – National Telecommunications Commission and the Secretariat of Telecommunications. Both of regulators "lack autonomy and expertise", therefore, government initiated a new antitrust agency (National Competition Commission) that doesn't need the approval of government to make decisions.

The unique feature of Argentina's regulation process is financing regulators by "taxes on firms or end-consumers in their industry" which, however, makes them dependent on government fiscal policy and taxpayers. Nevertheless, the authors predict positive shifts in Argentina's monopoly regulation owing to implemented legislative and structural reforms.

Conclusions

Therefore, international experience shows that adoption of policy requires detailed analysis of conditions with possible consequences considered earlier in order to choose the

right direction of development and avoid contradiction between expected and received results. Successes and failures of natural monopolies reform in other countries could be used to create an effective strategy of developing definite sectors. The given review raises a few important issues for the government to be solved before the policy implementation such as the following:

- ➤ existence of state incentive with definite tools to stimulate competition, cooperation and attract investment
- ➤ availability of clearly defined legislative base in terms of licensing, franchising, property rights regimes
- ➤ defining policy of price regulation
- ➤ identifying of type of regulator – either specific or multisectoral agency
- ➤ judicial separation of power to prevent duplication and misbalance in functioning
- ➤ defining budget sources and methods of control to ensure regulator's transparency and independence
- ➤ necessity of divestiture of incumbent for local and long –distance markets (particularly, for telecommunications sector), etc.

Clear answers to these questions would be so-called "enablers of growth" from the standpoint of its importance for the successful start of new regulation policy.

3.2 Applications of international practical arrangements.

Relying on world practice, it could be seen that regulatory authority can control one sector (for example, regulation of energy in Philippines) as well as a few related sectors (as power industry, gas and oil transfer, transport industry as Germany and Latvia at federal level (analysis of the Ministry of Economy and Budget Planning of Kazakhstan, 2008)) which are

the models of specific and multisectoral regulators. In terms of the type of regulator, various countries realize different policies depending on their geopolitical and domestic factors.

In Latvia, power industry, gas and oil transfer, telecommunications, sewerage and railways are the natural monopoly industries resulted from historical circumstances. Thus, it takes some time to liberalize these industries. In given conditions, the government is forced to set multisectoral regulations due to lack of competitive market and inability to liberalize industries quickly. Bulgaria, at the opposite side, has single specific regulator in sphere of energetics, water supply, heating and its subsectors. The German government in 2006 decided to integrate different regulators in single regulatory authority in such industries as power industry, telecommunications, transport industry, etc (analysis of the Ministry of Economy and Budget Planning of the Republic of Kazakhstan, 2008). All these given examples show that the way of regulation implementation should be chosen individually by every government.

At the present time, the sectoral regulation functions are separated between few government authorities in Kazakhstan. Thus, the Agency on Regulation of Natural Monopolies controls industries in terms of natural monopolies segments, while the Committee for Competition Protection regulates competitive segments with synchronous control from sectoral ministries for the same industries. This leads to inconsistency of actions, lack of single interrelated approaches, and the absence of common tariff policy, along with the lack f a responsible authority.

The next Kazakhstan model will represent the symbiosis of international experiences of forming specific and multisectoral regulators. Presumably, the Agency on Regulation and Supervision of Financial Markets and Financial Organizations and the Agency for Informatization and Communication will become independent specific regulators of financial sector and telecommunications respectively, while the Agency on Regulation of Natural

monopolies will work as a multisectoral regulator for railways, power industry, oil and gas transportation, civil aviation and port functioning.

As a result, the creation of independent regulators will accelerate implementation of purposeful balanced tariff policy as well as competition promotion, investment attracting and will satisfy interests both of producers and consumers.

CHAPTER 4. ANALYSIS OF CONDITIONS FOR USING INDEPENDENT SECTORAL REGULATOR MODEL IN TERMS OF KAZAKHSTAN ECONOMY (IN TELECOMMUNICATIONS SECTOR)
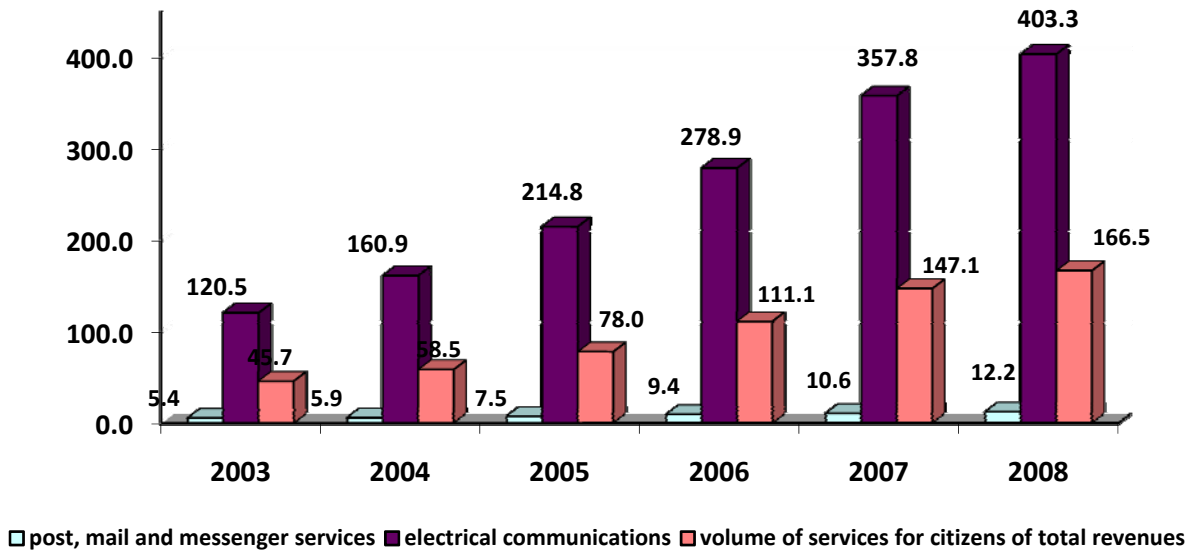
4.1 Main problems in telecommunications

The telecommunications sector is one of the most important industries for any country, as it accelerates development as well as ensures national security. Therefore, regulation of telecommunications would be a great obstacle and a great advantage at the same time.

According to the official Law of Communications of The Republic of Kazakhstan (passed on July 5, 2004 №567) "Communications are integral parts of economic and social infrastructure intended for satisfaction of individual and artificial persons' needs and ensuring of security, defence, law order protection, government authorities' needs in communications services." (translated by author)

Nowadays Kazakhstan's telecommunications sphere is at the critical point of development. The telecommunications industry is one of the most dynamic branches as proven by the sustainable growth of revenues from telecommunications services, increasing number of mobile and fixed communications users, and rising technologies for integrated services.

Diagram 1. Revenues from communications services, bln tenge

	2003	2004	2005	2006	2007	2008
post, mail and messenger services	5.4	5.9	7.5	9.4	10.6	12.2
electrical communications	120.5	160.9	214.8	278.9	357.8	403.3
volume of services for citizens of total revenues	45.7	48.5	78.0	111.1	147.1	166.5

□ post, mail and messenger services ■ electrical communications □ volume of services for citizens of total revenues

As far as positive dynamics in industry promotes economic growth and investment increasing, it is necessary to improve the telecommunications market with increased sophistication of regulation structures.

Until recent times, the telecommunications industry was controlled by the Agency for Informatization and Communication (AIC), the Agency on Regulation of Natural Monopolies, the Agency of Statistics, the Committee for Competition Protection (CCP), and the Ministry of Defence, et al. This complicated structure leads to uncertainty of future development for market participants and alienates potential investors. Therefore, existing structure requires improvement in order to be developed and competitive.

According to EBRD research "Although regulatory actions have been attempted by all three bodies since the opening of the market in 2004, very little has been implemented and the sector continues to be heavily dominated by the incumbent KazakhTelekom. It maintains a fixed market share of over 90% and has significant ownership stakes in 3 out of the 4 mobile operator. KazakhTelekom is 51% owned by government. AIC and CCP have both tried to apply relevant regulatory measures to control KazakhTelekom's market dominance using the existing laws on telecommunications and competition, unfortunately to little avail. New regulatory methods and procedures are understood to be under preparation. Though the market for communications in Kazakhstan is formally liberalised, the absence of meaningful control on KazakhTelekom's dominance has made market entry or survival for competitive

operators difficult, if not impossible". (EBRD Telecommunications Sector Assessment Report 2008)

Therefore, the current situation with monopolies and lack of effective regulation seems to be the main obstacle to the ensuring of a competitive climate in industry. This stumbling block creates consequences as low efficiency of telecommunications market, lack of innovations, limited choice for consumers in terms of prices and quality of services.

Based on the given research, Kazakhstan occupied a position with low compliance level in terms of telecommunications regulation among 31 countries.

Table 2. EBRD 2008 Telecoms Regulatory Assessment: Compliance table

Full compliance	High compliance	Medium compliance	Low compliance
Croatia Czech Republic Estonia FYR Macedonia Hungary Latvia Lithuania Poland Romania Slovak Republic Slovenia	Albania Bosnia-Herzegovina Bulgaria Georgia Turkey	Armenia Kosovo Kyrgyz Republic Moldova Mongolia Montenegro Russian Federation Ukraine	Azerbaijan Belarus Serbia **Kazakhstan** Tajikistan Turkmenistan Uzbekistan

Source: EBRD Telecommunications Sector Assessment Report 2008 "COMPARATIVE ASSESSMENT of the TELECOMMUNICATIONS SECTOR in the TRANSITION ECONOMIES" December, 2008

It should be mentioned that some Central Asian countries as Kyrgyz Republic, Mongolia, Russian Federation have higher positions and use innovative approaches in this sector. Thus, Kyrgyz Republic has an appropriate level of competition in the telecommunications market while Mongolia demonstrates effective implementing of modern service policy (EBRD Telecommunications Sector Assessment Report 2008).

Full-fledged development of this industry is hampered due to (EBRD Telecommunication Sector Assessment Report 2008):

- lack of investments in infrastructure development, particularly, in local areas;

- insufficient usage of budget subsidies;

- low level of innovative technologies adoption;

- low level of quality due to disbalance of tariff structure;

- barriers to competitive investments.

In addition, some specific problems in industry should be marked out such as:

- complicated and bureaucratized system of licencing which creates interceptions to the entry;

- limited technical capacities with using of obsolete facilities;

- high capital costs for connection;

- absence of control over KazakhTelekom's expenditures;

- absence of monitoring system over industry development.

All the mentioned problems become reasons for structural reforms and regulatory changes. One of the main instruments for improvement is the creation of an independent authority which will be responsible for the industry development.

4.2. Necessary conditions for effective functioning of regulator in telecommunications sphere

Efficient regulatory activities require the creation of a favorable environment to intensify the process of reforming. From the examined international experience and given peculiarities of the Kazakhstani telecommunication industry, some approaches could be formulated.

The main principles which create a foundation for independent telecommunications regulator's functioning include:

1.   Creation of regulatory authority in accordance with legislation aimed at unbiased and independent from government and participants activities

2.   Isolate regulator from political, intrasectoral and customer pressure

3.   Defining of different financial source than state budget in order to act unrestrictedly

4.   Power to regulate staff structure by itself without approval of government or interested party

5.   Availability of financial resources, qualified specialists and appropriate facilities

6.   Designing of necessary methods and procedures for effective regulation to ensure transparency in process of decision-making

7.   Carrying out of public consultations to find optimal solutions in designing key policy directions

8.   Clearly defined official order of functioning and restrictions equal for all operators in the market

9.   Availability of well-defined responsibilities and procedure of decision-making in terms of:

9.1 licencing regime, including rules for licence withdrawal

9.2 commutation, system of costs estimating, regulative mechanism of sector disputes and appeals

9.3 equal access to telephone network provided by incumbent

9.4 tariff regulation with methodology of tariffs' estimation

9.5 numeration including schemes of number serialization

9.6 transparent and fair method of spectrum allocation and licence issuing for using telephone frequencies

9.7 providing of basic and continuous professional training of sectoral specific skills to the staff

At the same time EBRD experts (EBRD Telecommunications Sector Assessment Report 2008) emphasize that program policy implementation in telecommunications sphere requires compliance of more conditions.

First of all, it necessitates government support at the first stage of independent regulator's functioning for vesting of authority and elimination of barriers to the entry. At the second, more effective political structure of sector for tariff rebalancing, providing open access to all interested parties and universal access in rural areas is crucial to realize new incentive. Thereby, complex of mentioned points would assure fertile ground for the future fruits reaping in form of effective regulatory system in telecommunications.

4.3. Necessary changes in legislative base for using advanced practice of independent sectoral regulator model.

The telecommunication industry functioning in Kazakhstan is regulated by Telecommunication law №567passed on July 5, 2004 which "sets up legislative basis for telecommunications industry functioning within the country's territory, defines regulatory power of government authorities" (Bulletin of the Parliament of the Republic of Kazakhstan, 2004). In accordance with law, the regulation is realized by the designated authority in order to implement state policy in telecommunications for the effective functioning of the telecommunication market and protection of individual and artificial persons' rights and interests as well as national interests.

There were three regulatory authorities responsible for realization of the given law in Kazakhstan – the Agency for Informatization and Communication (AIC), the Agency on Regulation of Natural Monopolies (ARNM), and the Committee for Competition Protection

(CCP) until June, 2007. In 2007, amendments to the law changed the spheres of power for authorities and three independent regulators were established – AIC in the telecommunications field, the Agency on Regulation and Supervision of Financial Markets and Organizations (AFM) for financial markets, and ARNM for other industries.

In terms of legislative reforms, EBRD notes that there is an appropriate level of existing legislation in general which, however, needs to be improved to ensure effective work of all regulative mechanisms.

"Although the Law on Telecommunications 2004 is broadly satisfactory, the regulatory framework in Kazakhstan is not effective today. The Regulator is not sufficiently independent and it lacks the resources and the powers required to tackle the problems that exist in the sector. Within the agreed policy framework, and always subject to the Law, the Regulator must be allowed and empowered to regulate the market objectively and free from day-to-day political intervention. Regulation must be facts-based and must reflect best international practice" (EBRD, 2009).

In general, telecommunications functioning in Kazakhstan fits with 34 normative acts including Constitution of The Republic of Kazakhstan, laws, administrative regulations and executive orders (Ministry of Economy and Budget Planning, 2008). Although all of them are in force, only two of them have real effect on the industry. Therefore, the first steps should be directed to making changes in the Communications Law and the Competition Law because these norms mainly define principles of working and regulate behavior of monopolist.

First of all, laws should be oriented more for consumers and investors to stimulate activities of new operators and competition. The crucial order of licensing should be determined clearly as well as definitions of dominant positions and tariff regulation for monopolists. Actually, the current laws do not describe the methodology of licensing and telephony spectrum allocation, level of state intervention in cases of monopolistic actions,

liability for discriminative actions.

It should be pointed out that most of added amendments are concentrated on regulation and liberalization policy in the industry rather than on the regulator's functioning itself. The ground for regulatory actions is well prepared by the legislatively accepted norms and rules which guide both regulator and actors in the market.

CHAPTER 5. TENTATIVE PRINCIPLES OF NEW AUTHORITY'S FUNCTIONING

5.1 Defining of main principles and policy directions for the new authority.

International experience and know-how from past decades demonstrate the main common features of regulators which have to be the basic principles of functioning irrespective of local conditions. The given principles are independence, financial and functional autonomy, a collective nature, accountability, transparency and openness, predictability, and consistency.

The regulatory authority must be independent from the intervention of the government, central and local powers as well as industries, investors and customers' affecting. Independence is strengthened by transparent processes of decision making, overall professionalism and well structured policies and strategies. These goals can be achieved through a balanced organizational structure with fair hiring of qualified specialists and real financial autonomy to prevent the influence of the state or other actors. Independence relates closely with efficiency of the regulator as well as confidence from the market's subjects, which should be earned by competent and effective activities following a systematic pattern of regulation.

In order to become truly independent and unbiased, financial and functional autonomy are the most important elements of a regulator. Autonomy implies the existence of a separate budget source which is enough for hiring high-qualified staff and managing work effectively and allows avoiding pressure from participants. At the same time the regulator has to have independent authorities in terms of determining its work structure and making appropriate decisions during the process of consistent regulation. All these measures will result in independence from the economic consequences of adopted decisions, a state of so-called "economic immunity" that is valid evidence of unbiased regulation. However, this immunity

doesn't apply to regulator's managers who break the rules and abuse their positions.

The collective nature of regulator's working is one more instrument to ensure objective policy making and prevent external influence. In this case the regulator is working based on a principle of balancing of professional skills or balancing of various actors' interests, or different geographic zones. The given condition allows the regulator to take into account all interests and evaluate the weaknesses as well as the advantages of each decision. The most effective structure for this is a group of three to five members, considering that a large team requires much more time for achieving consensus.

The best method to provide regulator's accountability is existence of clearly defined and officially stated functions, responsibilities and regulations with set goals to follow. These positions should include narrowed criteria of evaluation regulator's policy implementation to realize its functions correctly and does not allow of ambiguity. Thus, a structure must be determined by the legislature to evaluate the regulator's actions. Especially, placing authorities that can judge the legitimacy of regulator's policies is crucial for operation.

Transparency and openness could be realized through the legislative rules such as obligatory publishing of concerned issues and order of working in terms of matters of argument. The publishing of rules, regulations, and conditions followed by regulators also promotes the transparent way of functioning.

There are two controversial viewpoints in terms of providing comprehensive information about regulator's decision making processes. The first states that the process should be closed in order to restrict external interventions and improve the quality of solving problems while the second argues the invalidation of the first viewpoint comes from existing failures of international regulators. The last position supported by real example (Wales regulation), of incompetent regulator's behavior without taking into consideration the consumers' interests. Therefore, most countries nowadays prefer to get some disadvantages of

openness and transparency (conforming to public pressure) instead of getting dangerous results due to closed process.

Predictability and consistency of regulator's actions are partly implied by legislation which defines the general regulator's structure. However, in terms of defining, changing and following the rules, a regulator has absolute freedom. Thus, predictability and consistency of regulator's actions are exogenous factors in this situation that force the designing and implementation of appropriate policy to enjoy actors' confidence. The level of consistency, however, is determined by each regulator depending on special conditions in different countries. The necessary principle for all regulators' actions is compliance with strategy and long-term policy within its manual which should be combined with innovative and original approaches. The predictability and consistency of regulator's actions are the key factors for successful investment mobilization and working with private firms.

The formation of independent regulators is one of the Kazakhstan government's steps to promote a competitive environment and follow compliance with the requirements for joining the WTO. Thus, the following principles of WTO are crucial in organizing the regulatory framework:

- Regulator separate from and not accountable to any supplier of basic telecommunications services

- Prevent anti-competitive practices

- Ensure interconnection with major suppliers at any technically feasible point in the network

- Transparent, competitively neutral Universal services obligation (USO)

- Licensing criteria made public

- Allocation and use of scarce resources e.g. frequencies, numbers and rights of way, carried out in objective, timely, transparent and non-discriminatory manner (WTO 1996)

According to EBRD recommendations in order to create effective regulatory authority in the absence of a well-established decision-making process or institutional framework should include measures of separation of regulator from government, accountability to legislative branch power or state authority which is not related with communications sector, legislative regulations about governing board, methods of financing and wage level determining, and a strict code of conduct for the regulator. These principles are the main basis of effective regulation in any sphere and any country.

Based on EBRD recommendations, the regulator on telecommunications industry was founded on the basis of the functioning Agency for Informatization and Communication of the Republic of Kazakhstan (AIC). However, its policy and functions did not change greatly from the previous variation, even though official guidance and concept for regulator acts was developed by the government in 2007.

The approach developed by EBRD implied changes in the existing structure of AIC instead of the foundation of quite new authority. According to Kazakhstan Communication Law AIC is responsible for "policy-making in the field of telecommunications" (Article 7), however, the world best practice shows the effectiveness of separate policy implementation and regulative functions. This was resulted in the recommendation to hand over the policy making function from AIC to a Ministry.

There is, however, some nuance that exists in terms of absolute separation of policy-making and regulation. This means that key issues like privatization, taxation, and investing

of funds could not be determined by the state or regulator separately. It will necessarily require cooperation between these two branches in order to make a competent decision, thus, the opinion of each stakeholder must be taken into account.

The next recommendations include arrangements of improvement of legislation aimed at eliminating barriers created by incumbent structures with discriminative conditions, norms in terms of USO liberalizing, bringing new elements for Kazakhstan such as "unbundling", the creation of new interactions between the regulator and actors, and means for adjustment of disputes.

Examining these steps it might be noticed that some of them have been realized by the Kazakhstani government such as determining the functions and the separation of power while legislative changes are still being developed. On the other hand, the promoting of unbundling and a new regime for interactions will take a long period of time considering the lack of a mature institutional and legislative framework in Kazakhstan.

5.2. Identification of basic functions and responsibilities, financial basis and personnel policy for the new authority

The basic functions of an independent regulator are covered by the relevant authorities covering state regulation of prices and tariffs concerning actors, ensuring of open and non-discriminative access to the infrastructure and services, and analyzing and monitoring price levels in the market, market structure, licensing, and making adjustments of disputes.

In terms of authorities, the EBRD experts emphasize importance of the following aspects: as general responsibilities - right to information acquisition and investigation as well as law enforcement, as specific functions – "licensing, interconnection, universal services, tariffs control, transparent methods of allocating spectrum, etc" (EBRD 2008).

Financing of the regulator remains as the most controversial issue because well-

organized operating requires solid financial funds, including appropriate wage levels to avoid corruption. The EBRD's (2008) point of view on this issue consists of a recommendation to support financing by "charging a levy on the turnover of licensed operators and charging the administrative costs incurred in allocating licenses". Other revenues from operators go to the state budget directly. This model is similar with the working Australian model that was examined in previous chapter but has weaknesses as revenue levels can be uncertain and also might be the reason of unbiased actions.

The human resources policy is one of the most important parts in the process of creating a new authority due to the increasing value of human capital and appropriate training to be able to implement competent policy at the regulatory level. As EBRD specialists (2008) point out "Regulator needs to ensure that the staff in the office have competencies and values which will support the work and image of the Regulator". Staff must be high-qualified in technical, legal, economic, finance and policy expertise. The basic priorities in hiring professional staff which should be complied are "common vision and values, integrity, impartiality, objective, professional, effectiveness, teamwork, communications and flexibility". Further hints describe the necessary training courses for new hired persons and continuously training of managers.

Actually, these features do not imply any special skills or knowledge, however, elaborating policy should take into account some national peculiarities in human resource management. For developing countries where living standards are still low, effectiveness of regulator directly correlates with honesty and incorruptibility of its members. That is why integrity and impossibility to affect on members should be key targets in defining people-ware policy as well as general regulatory policy.

It should be mentioned that the main obstacle for Kazakhstan on the way of effective regulation is not ignorance of aforementioned tools but ignorance in terms of methods to

implement it in real conditions. It is obviously that all given arrangements will touch other related industries, therefore, this issue is a pertinent question which can not be solved by formal documents only.

Now the main question is why some of these recommendations do not work in reality because the aim of all implemented arrangements is an effectively functioning regulator.

As for functions of the new regulator, the tariff regulation function is the discussable point due to existing norms of legislation where any subject with low market share is controlled by tariff restriction the same as the larger incumbent that creates unequal conditions[2]. Strict tariff regulation in this case destimulates small firms to operate and increase their market share, affects the net value of production, reduces investments for the innovations and makes the market unattractive for the investors. As a result, the economy has decelerating competition and pressure on consumers which is the opposite situation to the goals of regulation. At the same time, there is no clear mechanism to approve tariffs level.

There are similar aspects that must be considered in policy implementation, such as blurred regulations in licensing regime; allocating spectrum is also challenging moment caused by dominant position of incumbent with advanced network and administrative barriers. Concerning Universal Service Obligations (USO) there exists some apprehension about the allocation of resources received from USO and reinvesting to maintain appropriate quality level.

The unbundling of telephony (using existing local telephony network by operators) also creates some contradictions because it could be a braking forces for investors to introduce their own local infrastructure in remote districts as they already have a well-organized network. This point is supported by the experience of USA where investment in telecommunications sector grew up to 40% from 2005 to 2006 after the state rejected local

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[2] Competition Law of The Republic of Kazakhstan, passed at 25 December, 2008

loop unbundling in 2003 (Tulegenova, 2008). Thus, in order to support alternative investors it is required to weigh all reasonable arguments in the adaption of an unbundling mechanism.

On the other hand, all work carried out to date concentrated on fair competition promotion while some recommendations have negative externalities on incumbent (KazakhTelecom) operating and restrict its activities to develop. It is really challenging to keep a balance between the promotion of new actors as well as maintain the ability for the incumbent to act fairly. The above mentioned are few not all discussable points in EBRD advices which have to be solved to choose the optimal way of realization. It again demonstrates the absence of clear determined approaches to execute international recommendations successfully. Therefore, realization of all recommended arrangements becomes slow and sometimes impossible due to specific endogenous factors and features of the telecommunications industry and economy as a whole which in turn makes regulator's functioning ineffective. All the mentioned arguments should be considered and coordinated before the regulator's functioning.

CONCLUSIONS AND RECOMMENDATIONS

The process of adoption of a new incentive is always challenging and complicated as is any innovation which breaks the old structure and rules. Policy implementation takes time and supreme efforts in order to work in real given conditions.

The Kazakhstani reform of telecommunications industry regulation is not an exception of existing experience in regulatory field. The initiation of an independent authority to control and regulate monopolistic actions aimed at competition promotion as well as investment attraction has a chance to succeed if there is common purposive movement from all participants. The study sought to analyze obstacles and determine some ways to organize the given process in order to get appreciable results on the way of effective regulation and sustainable economic development.

First of all, the necessary prerequisite for any successful reform is a clear and reasonable legislative base that will provide the main guidance without any ambiguity. Thus, Kazakhstan's legislation needs to be improved in terms of tariff regulation with definition of dominance, order of license issuing which is still undeveloped and too bureaucratized with various administrative barriers, separate political and regulatory power with determining principles of regulator functioning. At the same time, the solving of fair regulation problem is inseparable from the liberalization of the telecommunications industry that is not absolutely completed in Kazakhstan and presents a long and complex process. Liberalization with all aspects also requires legislatively accepted principles. Therefore, in order to create an appropriate system of regulation, legislative amendments should cover a large pool of rules as well as norms in related spheres.

Secondly, regulatory reform should be based on global experience and be able to adopt the latest achievements in telecommunications industry since Kazakhstan needs to

comply with high-level international standards for becoming an advanced economy. It relates with the development of Universal Service Obligation, which has become an necessary part of the telecommunications sector. However mechanisms for this are not determined correctly in the existing regulation.

Another important issue in the process of regulatory reform is balanced competent managing among market subjects in order to not unfairly hurt the incumbent's operations while still restricting unfair actions. Aggressive state policy of intervening into incumbent functioning could be more dangerous than the absence of regulation due to the remaining importance of the incumbent's network and facilities. The purpose of regulation is not the persecution of the incumbent but rather the provision of equal conditions for all actors. Thus, regulation policy should take into account the current interests of national operator "Kazakh Telecom" (in terms of unbundling, tariff regulation and capital flows controlling).

The solution to create an independent regulator on the basis of the existing Agency (AIC) was strategically correct and reasonable, according to EBRD recommendations, because AIC had already organized structure and specialists of this field. However, the regulator is required to be modernized in terms of policy directions with independence from the government and private sector. It might be that reorientation will take much time for AIC due to its former obligation to act always within the government policy. Such aspects could be solved by developing new regulations and strategic planning for regulator itself.

One of the most important factors for effective functioning is the availability of qualified and unbiased experts. Compliance with this condition relates closely with independent financing of the regulator. A definite order and scheme of financing and resource allocation, including appropriate wage levels for the staff, is needed to organize the work efficiently.

Therefore, satisfying the above mentioned conditions in addition to basic

international regulatory principles might be the solid ground for a new authority operating as a valid legitimate independent regulator. Further development of regulatory policy in Kazakhstan will be defined within priorities of state strategic course and dynamic movement of the world economic system.

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