

## RELEVANCE OF THE REGULATION OF INNOVATION WITH THE CHALLENGES OF INFORMATION TECHNOLOGY AND COMPETITION

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**Abstract.** *Intellectual property is directly connected with the competition law. On the other hand, it should be noted that innovation as a part of intellectual property rights makes a significant element of companies' activities if they want to be competitive in the market. This is the reason why it is possible to say that competition law belongs to rules of economic relationships. Law is important for companies in the sense of promoting economic efficiency. The competitiveness is the ability of a region to export more in value added terms than it imports. That definition is very important for companies and for investors at the same time. Due to that, governments have to pay attention to all possible so-called discounts, including an artificially low currency, suppressed wages in export sectors, artificially low taxes on traded sector firms and direct subsidies to exports. Governments, but also the legislators should control barriers and obstacles, in order to improve measurements to eliminate them. It could be a very important sign for the investor. Finally, intellectual property rights will show their significance through the companies' competition policy. The whole Europe develops research and development area, focusing on major competitors. Due to that task, participants are interested especially in the share of private investment in the field of research.*

**Key words:** *innovation, competitiveness, legislation, companies, investors*

**JEL Classification:** O31, D41

### INTRODUCTION

Generally speaking about innovations, any lawyer has always had on mind differences between law and economics, on the onehand, and law and technology, on the other. Definitely, both aspects have to exist, as well as to share experiences and results. The

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definition of innovation needs to be so wide in order to integrate both streams. But, the best solution could be to add the third element which involves a social impact. Law and economics theories pay attention to regulation for innovation. Often, the term *innovativeness* could be noted in literature. What is the difference, or maybe a better question is: is there difference between the two mentioned terms? Innovativeness would be defined as market failures, for example market power.

Lawyers and economists assume that innovation is good for welfare. Also, law and technology, on the other hand would help make up for that flaw to all interested participants in the economic relationships. The reason for that consideration is in the fact that it should be imperative to regulate the innovation, having regarded all mentioned aspects. The lawyers usually make difference between a horizontal dimension (time) and a vertical dimension (level of generality). Additionally, lawyers and economists, together, would point out in the other direction. They offer insights into so-called institutional models that allow a balance among law, economy and innovations.

The connection between the economic area and regulations on the other hand would maintain a certain level of openness or competition in product markets. OECD, through its principles, in 1996 made a step forward in regulations sense. This organization created some news, for example new products as a part of 'environment industry'. That was a condition for higher level of innovations. Generally speaking, that activity entailed more certitude for all economic participants in the innovative process, in particular regarding the intellectual property rights protection.

OECD organization prepared and presented the principles. But, as well as the others recommended by this institution, they are not obligatory. They belong to so-called soft law. Speaking about the sharing services under the EU Law, the group of new technologies involves innovations of telecommunications, as well as the Internet services. And the effects of insufficient competition in impeding technology diffusion are visible in the telecommunications sector. Having regarded the mentioned rules, it could be noted that they are under monopoly control in many countries. The principles of OECD are the example for that. Among Member states, only eight allow competition in the underlying telecommunications infrastructure. On the one hand, the mentioned act was amended in 1996. After that period, the innovation area, including the Internet in particular, became one of the most important ones for all possible participants in the business world. Statistic data show that usage of the Internet is five times higher in competitive than in monopoly markets (Hoj et al., 1996). On the otherhand, the diffusion rate for mobile phones is directly related to the national regulatory regime. OECD research shows that the monthly growth in subscribers per 1 000 inhabitants is less than 1%, rising to 1.7% in duopolies and to almost 3 percent in markets with open competition (OECD, 1996a).

#### 1. FIRM SIZE, BUSINESS OPERATIONS AND INNOVATION

Intellectual property is directly connected with competition law. On the other hand, it should be noted that innovation as a part of intellectual property rights makes a significant element of companies' activities if they want to be competitive in the market. This is the reason why it is possible to say that competition law belongs to rules of economic relationships. Law is important for companies in the sense of promoting economic efficiency. Generally speaking, that principle involves the situation when the company produces what the consumers need, on the one hand, as well as does it at the lowest possible prices. In business

practice, there are different theories regarding the relationship between competition laws, first of all the concentration, on the one and innovation, on the other hand.

Definitely there are numerous different opinions regarding the connection between the companies and innovations. Also, in theories there are some significant concepts among social scientists. For example, Schumpeter introduced the principle that “*concentrated market structures* should favor technological progress mainly for reasons of static efficiency based on scale and scope economies” (Symeonidis, 1996). Following this concept, there is a proposal that the large companies have an important role in the innovation business. Several reasons could be found for that. For example, large companies are in a better position to finance serious research projects, and they do it from their own profits. This component is significant for companies due to the possibility to get expected benefits from innovations. Large companies know that every innovation improves their status on the market and puts them in a better position among the competitors. However, this opinion is formed following the principle that *competition among firms* favors innovation and technology development. It means that the absence of competition could result in less innovation. But business practice shows that all large companies do not share the mentioned opinion. Clearly, the companies that have monopoly market position would not be interested in innovation process, because they already control all or most of the market. The connection between competition and innovations is needed, definitely. Competition policy should be defined by law following the principles that the elimination of monopoly should help efficiency.

Competition policy, on the national level, as well as generally speaking, involves the competitiveness as obligatory element. Competitiveness is the ability of a region to export more in value added terms than it imports. That definition is very important for companies and for investors at the same time. Due to that, governments have to pay attention to all possible so-called *discounts*, including an artificially low currency, suppressed wages in export sectors, artificially low taxes on traded sector firms and direct subsidies to exports. Governments, but also the legislators should control barriers and obstacles, in order to improve measurements to eliminate them. It could be a very important sign for investors, including interested innovators.

The question is whether the company size is directly linked to its efficiency as well as market success, including innovation possibility. It means that the previous opinion could not be understood generally. It is clear that the value of competition to the innovative process, on the one hand, and economic studies of the relationship between company size and innovation, on the other, have got different problems.

However, there is an opinion that there is no general trade-off between the size of a firm and its innovative capacity. Generally speaking, innovation should be characteristic of all companies, no matter their size. Innovations have to be advances for all kinds of companies. There are many reasons for the mentioned conclusion. Large companies highlight the financial advantages in improving innovations and technologies. One of the main results of these activities could be higher productivity and product quality. Also, large companies should have a higher level of concentration as well as human resources regarding R&D intensity than other enterprises. At the same time, small- and medium-size companies may have advantages in producing so-called changes to products and technologies. They have to pay attention to the nature of innovation, as well as sectors of innovations development. Many of small and medium size companies will organize activities in cooperation due to research efforts, all in order to achieve the scope of advantages of larger companies (Symeonidis, 1996).

Obviously, serious legislators, but also business people know that there should be noted a higher level of competitiveness of companies among own competitors if they provide

investments in innovation procedures. That conclusion is one of the priorities of the European Union competition policy. Due to the previous principle, the European Union and the Member States need to ensure that the conditions necessary for the competitiveness of the Community's enterprises exist. The European Union 'reforms' in that area involves facilitating adjustment to structural changes as one of the most important steps. In addition, authorities have to encourage a necessary environment for entrepreneurship, particular in small- and medium-sized enterprises, their cooperation, and an environment. All these measures should make conditions for better exploitation of the innovative potential of enterprises.

In period 2001-2013 interesting results among European companies were noted. The Commission's Annual Growth Survey from 2014 defined some factors that are in position to generate fast growing 'innovation companies' on a large scale to the market. According to some authors' research, it is clear that the capacity of an economy to create jobs in fast growing firms in the most innovative sectors is the main source of GDP Growth (Harhoff et al., 2003; Putnam, 1996; Van Zeebroeck, 2011). For example, during the period 2001–2013, the European Union member states which have the highest effectiveness also noted an annual growth rate of their GDP. At the same time they make a triple of the rate of increase in GDP then the other European Union Member States.

European Union Commission is not the only subject under whose authority is innovation regulation and research. There are many interested entities. They are trying constantly to define advantages and obstacles in order to improve the former and eliminate the latter. The Lead Market Initiative for Europe (LMI) was established in order to support markets that are highly innovative. It should provide solutions to broader strategic, as well as necessary societal, environmental and economic challenges. The states which provide these conditions for innovators will have a strong technological and industrial base. Obviously, it would be easier to develop the innovative companies. However, it seems that this is easier in theory. Business practice shows that only a small percentage of defined companies reach a sufficiently significant size to establish themselves for the long term in the global market. Definitely, there is a lack of a sufficiently integrated system of innovation. Often innovations are put in market margins, leaving competitors to impose their norms or business cases.

Having regarded previous statements, according to the Operational Programme of Innovation and Competitiveness, adopted by the European Union (example Bulgaria) for period 2014-2020, this kind of legal act is needed and it should contribute to increasing the investment (it does not matter whether public and private) in the field of research and development, as well as innovation. Expectations are particularly connected to the sectors of manufacturing and services, and with the aim to achieve the national goal of 1.5% share of GDP of R&D costs in the named country.

Legislators know very well that regulations in the field of innovation has to be flexible enough in order to offer the best conditions for all participants. This is a serious aim as well as task, particularly for governments. They have to provide rules for covering interests of companies, innovators, and the other interested parties. These rules can be particularly onerous for small and medium-sized enterprises. It seems that this size of companies could be among the most technologically dynamic of enterprises. The opinion is that small- and medium-sized companies are suitable for establishing the business and at the same time encouraging innovations. But, this opinion should not be understood generally. As it is shown in table 1 in some countries the process of establishing a business can take months and incur substantial costs. Innovations need flexible rules, but rules nonetheless. Legislators have to pay more attention, especially to protecting participants' rights. Innovators are very interested

in that segment, as well as in security for their products. All mentioned elements have to have their own place in the innovation procedure.

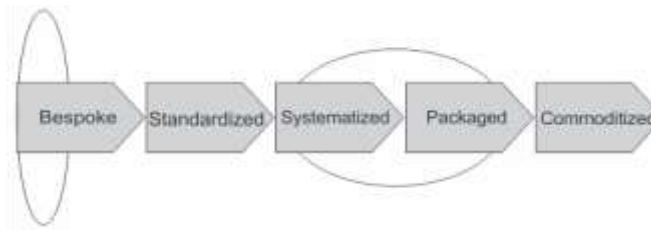
**Table 1** Comparison of formalities for setting up a business

COUNTRY (Type of firm)	Number of Procedures	Number of days	Estimated costs (ECU)
France (SARL)	15	28 - 56	1 900 - 4 600
Germany (GmbH)	8	56 - 168	750 - 2 000
Greece (EPE)	24	21 - 70	750 - 2 000
Italy (SPA)	21	154	700 - 7 000
Ireland (ULC)	6	14 - 28	300 - 700
United Kingdom (PLC)	8	42	500 - 1 000

Source: European Commission (1995), Green Paper on Innovation

## 2. OBSTACLES TO INNOVATION

The regulation is one of the most important elements for innovation development. However, a whole complex of restrictions could be found in the field of innovations. This fact could be presented as an opportunity for innovative lawyers. Lawyers have a task to make systematization of services offering the chance to provide responsibility as well as competitive prices for companies as very important participants on market. Additionally, there is the importance of presenting the provision of packaged legal services. The possible prediction is that it is an unattractive area from a commercial point of view. On the other hand, this sector could be seen as such that keeping the competition out of the market is central to success. (Susskind, 2010, p.37). Companies are definitely capable of assessing the quality and risks of legal services delivered through markets. At the same time, companies are in the position to assess the quality and risks associated with very different inputs, for example accounting, investment banking, consulting. Companies have to keep in mind the significance and importance of innovation regulation. Due to that, many companies make decisions to employ attorneys - agents in the legal market, providing a high level of expertise. According to Richard Susskind (2010) the present challenge for lawyers is to continually innovate the new bespoke offerings. He presents his opinion in the following figure:



**Fig. 1** Scope for innovation

Source: Susskind, 2010, p.39

The most important effect of regulation of the market for corporate legal services is the reduced innovation in legal products and services. For modern economy it is

significant that the law should make order in this area, bring innovation in legal procedure and definitions, for instance, provide the protection for all participants.

Generally speaking, law makes a few major well-known effects on innovation. Maybe the greater impact of professional regulation on the capacity for innovation in legal area probably comes from an indirect obstacle. What is an indirect obstacle-barrier? It could be defined as ‘the homogeneity of the population of potential innovators’ (Operational programme, 2010-2020). Legal regulation is a base for highlights the benefits of diversity. Lawyers work together with other experts. In their day-to-day work environment, legal work means that the information exchanged about problems, solutions, and practices is highly restricted. The limitations on diversity in ‘the client pool’ imposed by conflict-of-interest rules ensure further homogeneity of perspective.

**Table 2** Barriers for innovation development in selected sectors

Sector	Specific to the sector barriers for innovation development	Interrelated obstacles to innovation
ICT	Inadequate system for protecting ICT's assets, such as innovative services and business process innovation	Shortage of skilled labor Lack of cooperation between businesses, universities and research units
Mechatronics	Large number of small players at the base line of the value chain	Energy inefficiency
Medicine and pharmacy	Undeveloped system and inappropriate infrastructure for research at initial stage and tests.	
Knowledge intensive services	Inappropriate system for protecting IP assets, such as innovative services and business process innovation  Shortage of entrepreneurial skills  Low level of information for funding opportunities and limited skills and capacity to access such opportunities  Low level of cooperation between researchers and business.	Ineffective implementation of IPR  Limited access to funding

*Source:* OPIC 2014-2020 aims also at overcoming main barriers to innovations in selected areas

The Innovation Strategy for Smart Specialization is one of the basic rules due to cover many different areas. Having regarded the legislators' aim, the Strategy should make efforts to harmonize existing solutions in the field of economic development, research and innovation. At the same time, the strengthening of the link between science and business is highlighted. The draft version of Innovation Strategy provides rules for vertical thematic areas. Vertical areas involve, for example, mechatronics and clean technologies, as well as informatics, biotechnologies, and new technologies in creative and recreative industries. On the other hand, there are also important areas, in so-called horizontal policies. They cover

ICT sector and resource efficiency, as well as technological niches. Operational Programme 'Innovation and competitiveness' from March 2015 defines investments in such a way that they are introduced as the first objective. A very important fact is that POIC supports activities exclusively within the thematic areas and previously mentioned horizontal policies of goals noted in research innovation strategy.

### 3. REGULATION OF THE INTELLECTUAL PROPERTY RIGHTS

Innovations should be seen as a part of intellectual property rights. According to the international law, the field of intellectual property rights involves different segments, such as patents, copyrights, trademarks, and the others. All of them highlight some common conditions. The first one is regulation; it means harmonization of the rules in European countries, not only the European Union members. And secondly, as previously mentioned, a very important degree of protection granted by the government to creators and inventors for innovation. Legislators have constantly to pay attention to providing a balance between rewarding inventors and invention's limitation and increasing the returns to R&D.

Intellectual property rights law is specified by some limitations. These rights are connected to national regulations, for example territory and timely limitations. In contrast, the other fields (branches) of law are understood as completely international. The result of that could be so-called *differences in national approaches* regarding intellectual property rights. But, this approach produces difficulties for multinational companies seeking to patent inventions in several countries. Having regarded this principle, OECD as international organization had an important role in defining the "first-to-file" rule. According to that rule, the first patent applicant has priority over any subsequent applicants. In other countries, there is the "first-to-invent" rule, characterized by application by which the innovator has to prove the development the innovation (in the United States, for example). Such regulatory differences underscore demands for greater world-wide harmonization (OECD, 1996).

Definitely, the protection of the intellectual property rights has to be in the focus of governments and the other interested entities. This imperative is the result of the present weak protection of intellectual property rights and limits. For example, limited patent duration, or extensive compulsory licensing would reduce the incentive to innovate. Often research and development (R&D) is understood as the main segment of intellectual property rights. It is correct that research and development involve all known forms of intellectual rights. Also, the expectation of an innovator from research and development is usually based on possible private returns to the investment which will justify the expense. Participants have to be very careful. The exclusive rights to exploit an invention provided by overly strong intellectual rights protection can lead to abuse or misuse of monopoly power. The matter of fact is that the benefits of innovation may be greater if it is spread more broadly through society. That could be possible in a case where the research and development provide increasing productive efficiency of the economy. The regulatory challenge is in providing the balance between the interests of the innovator and those of the public. In present economic conditions which are characterized by the globalization period, there are a number of concerns regarding the ability of traditional intellectual property regimes to stimulate innovation and at the same time promote technology diffusion.

Intellectual property rights will show their significance through the companies' competition policy. The whole of Europe, including the European Union members, develops research and development area, focusing on major competitors. Due to that task participants

are interested especially in the share of private investment in the field of research. It is therefore important to see if more appropriate framework conditions would allow maximizing the impact of public spending, as well as increasing the incentive for the private sector. Investing definitely has to result in more possibility of employment and income (The Global Competitiveness Report 2013-2014). The common fact for competitiveness and investment, according to the European economy policy is productivity. In addition, the link between innovation and productivity could be observed. It is clear that the impact of research and development investment on productivity is very strong. According to Van Zeebroeck (2011, p.33-62), „public R&D intensity” is the expenditure on R&D performed in the public research system (higher education institutions and other public research organizations) as a % of GDP. The link has shown some serious problems, especially during the crisis after 2007 and 2008. The data noted lower results in all important areas: employment, productivity, competitiveness, and naturally in research. In order to improve their own results, the European Union countries tried to compare their position in mentioned areas with the same in the other productions, for example the United States or China. The comparison should show necessary changes, especially in order to make impact to investors’ interests. The European Union has to be worried due to the shortfall of investment over the past few years. The investment was lower of around EURO 430 billion than in the previous period. According to the Commission Report that situation has a negative impact on the capacity for the EU to remain competitive in the long term.

The European Union makes some impacts and amends new legislation in the innovations area. The significance of the innovations is one of the priorities in European Union bodies. One of the basic acts is the Investment Plan for Europe. That act is the part of the Better Regulation Agenda. What is the main aim of the Agenda? It should constitute comprehensive packages of various instruments with mutually reinforcing impact. The market has shown different needs as well as questions, and the European Union tries to find possible solutions. Definitely, as the first step, the existing regulations should be improved in order to make better and stronger impact on innovation. According to the Investment Plan, the Agenda would achieve an optimal balance between predictability of the regulatory environment and adaptability to technological and scientific progress. Research and innovation performance in the European Union Report from 2014 defines all measures which have to be a part of regulations in order to provide approach to the assessment of the combined impact of legislation, involving increasing the effectiveness and coherence of the regulatory framework. Innovation is important not only for innovators but for countries, and local governments. All research that must be done before realization should check implementation issues that can affect outcomes. Also, in order to eliminate problems on national, regional and local levels, legislation should be the result of common interests belonging to participants in order to identify problems and seek solutions.

Generally speaking, the Commission’s Agenda provides a framework for further work on innovation. For example, in addition to the “Lighten the load” website Platform is amended. That act provides the realization the interests among stakeholders on regulatory burdens, inefficiencies and obstacles. In 2015 the Commission introduced the Better Regulation Guidelines in order to provide a dedicated “Research and Innovation Tool”. The meaning of that act is to define how to evaluate the positive and negative innovation implications of options for new legislative proposals. This is in line with the concept of so-called “innovation principle” (Fraunhofer, 2015). The Agenda involves the tools that allow the possibilities of the cumulative burdens to be identified. It could be important for companies and their market competitiveness.



Innovation is most important for companies that invest in this area. The importance of investing in innovation should result in high quality, as well as cost-effective regulatory framework. These elements directly make strong impact on the companies' growth. Companies definitely understood that it is "more important in their activities using or producing high technology". (Harhoff et al., 2003) Different forms of innovations make it possible to invest in many activities. Very fast development in technology area, particularly in the field of new technologies, improves intellectual property rights. It is the European Union, as well as the other interested entities that are trying to follow that development by appropriate legislation. There are numerous examples. Common characteristic is their positive impact: the Water Framework Directive, the Directives concerning Drinking Water, Groundwater, IPPC and Urban Wastewater.

Having regarded the beginning of regulation of the innovation involving connection with competitiveness, it is possible to find out the directives in the field of energy, as well as car industry. One of the examples is the general purpose of European Union regulation in order to reduce energy consumption for a given use of equipment or of cars. The aim is very clear, especially speaking about the European Union climate strategy to cut greenhouse gas emissions. Common benefit for all member states of such regulation is the positive effect on energy security. Three regulatory instruments are of importance: consumer-friendly color labels, mandatory energy limits and credible compliance (COM 2014/15).

Similarly, the End-of-Life Vehicles Directive 2000/53 and Annex II (the last in 2013) were amended in order to reduce waste arising from end-of-life vehicles (ELV) for cars and light commercial vehicles. That act has had and still has a significant impact on innovation in the car and car-related industries.

Also, legislators paid attention to the mobile telephones industry (GSM) and defined a European standard stimulating a breakthrough technology in mobile at the time, with a highly positive impact on the European Union mobile equipment industry's competitiveness.

Definitely, innovators are interested in certainties defined by legislations on different levels. The existing legal framework has shown possibility on at least two levels: European Union rules, as well as member state's law. The European Commission has a serious task during harmonization procedure. It seems that it is the only way to eliminate a regulatory obstacle. Barriers and obstacles are possible to be noted through the implementation of legal acts. In this way, potential barriers to innovation can be noted and highlighted. Member States governments would be involved in solving the problem but without derogation from the existing regulatory framework. It means that the European Commission should offer solutions that will be the result of involvement of authorities on all levels and with respect towards national characteristics.

There is no same answer from all European Union Members regarding legal base for the innovation-competitiveness relationship. The European Union adopted the Innovation Deals (IDEA, 2105). Previously, the Government of the Netherlands started with the implementation of the 'Green Deal' Programme. The Netherlands supports the national Green Growth policy. That policy involves and very successfully provides regulatory clarity for innovative solutions. Innovation Deals would support specific innovative initiatives. For example, it could be innovations that have only recent and limited or even no access to the market with the potential of wide applicability. The European Commission and the relevant Member State authorities stay on position that Innovation Deals would have the chance to find ways to avoid potential innovation barriers arising from the existing EU law or Member State implementation. Having regarded all possible differences in

national legislation, and European Union rules on the other hand, the Innovation Deals tries to eliminate some obstacles. Due to that task, the outcome of Innovation Deals would be considered by relevant Member State authorities for their policy and legislative actions. It is useful for member state authorities to ask for promotion in order to implement the Innovation Deals rule on their own economy, environment, growth and job creation.

After so many definitions, highlights of legal regulation needs, as well as different opinions and experiences, it is clear that competitiveness, innovations and economic efficiency are directly connected. In the 'sea of definitions' it is the World Economic Forum's *Global Competitiveness Report*, where the following note is being used for competitiveness: "the set of institutions, policies, and factors that determine the level of productivity of a country." Additionally, *World Competitiveness Yearbook* defines competitiveness similarly, but more broadly, as how an "economy manages the totality of its resources and competencies to increase the prosperity of its population." (IMD World competitiveness center, 2012) The situation in world economy is characterized by increasing globalization. The result of that is that the term competitiveness has become ubiquitous. The question is: what does it actually mean? On the one hand, there are opinions that competitiveness is equal with productivity, particularly if it is noted at national level and GDP growth (Putnam, 1996).

On the other hand, and it seems numerous so, the importance of making a difference between traded and non-traded sector industries is highlighted. And, it is important to make a difference among companies regarding their activities, as well as a significant share of their geographical area.

In addition, there are more specific definitions of competitiveness. But, the most interesting are definitions that have connection with innovation on the one hand, and economy on the other. Having regarded previous opinions, competitiveness relates only to the economic health sectors. The question would be how to know the companies will be competitive, and how they can realize the needed level. Definitely, the economy policies have to define sectors from which highly productive results regarding employment are expected, as well as the value-added ones in the sense of the amount of value that the named sector companies add to the inputs of production that they purchase. The problem could be in a situation when a stronger economy has larger impact of the value added on competitiveness.

#### 4. THE SIGNIFICANCE OF INNOVATION

Why should competitiveness be compared with innovation definition? Generally speaking, competitiveness is almost always incorrectly equated with productivity. In turn, innovation is usually defined narrowly. The reason is in the prediction that the innovation is noted as only technological in nature. It means that innovation should result in new products. However, there are the other meanings of innovation. For example, innovation should be focused only on the research and development activities occurring at universities, national laboratories, and corporations.

Definitely, definitions could limit the core of any subject. The same situation is regarding competitiveness and innovations. In spite of possible limitations, definitions are necessary. Because of that, many organizations are trying to improve elements of definitions of these two institutions – competitiveness and innovations. One of the examples is the Organization for Economic Cooperation and Development that defines innovation more broadly as "the implementation of a new or significantly improved product (that is, a physical good or service), process, a new marketing method, or a new organizational

method in business practices, workplace organization, or external relations” (OECD, 2010). Additionally, innovations can make significant influence on the development process, using different segments. Among important elements, in the sense that innovations could not develop themselves, are technology transfers, production, as well as the deployment or marketplace usage.

In economic theory it is possible to find different comparisons among innovation, competitiveness, and productivity. For example, Bloomberg includes productivity as one of its seven variables for ranking the 50 most innovative nations (Susskind, 2010). It is clear that innovation is directly connected to productivity. But, there is no equality mark between both institutions and competitiveness. In business practice there are many possible situations when innovations have more or less influence on productivity or competitiveness. A very good example in modern technology industry is that the innovation of the smart electric grid will help boost electric utility productivity, but at the same time it will do little to boost competitiveness, as electric utility services are not typically internationally traded (Radoshevich & Strogilopulus, 2012) In addition, the development of a new technology should result in better prediction of quality of life. At the same time, it does not mean that it would not directly affect productivity. Clearly, there is a completely opposite situation where some sectors or elements in some industries would improve the standard of life, but not lead to competitiveness. Having regarded previous statements, the conclusion could be that the innovation can increase productivity and competitiveness; it is not synonymous with either.

#### CONCLUSION

Innovation must be the priority for all participants. The first entity, in any sense should be the government, as well as the legislator. All levels have to be involved in making decisions. Having regarded the innovation as a focus, the actions that will be supported by different subjects should be defined. There are some activities organized in a way of supporting, not at all as a limit for innovations and innovators. Legislation and entities that implement the rules should provide the development of cooperation for innovation between companies, as well as between business and academic subjects in order to improve the innovation process.

One of the necessary steps is definitely the development and introduction of new products, processes and business models in companies. Following, innovation process cannot be completed without supporting for development of environment and research and innovation infrastructure for business needs.

Finally, innovation process is characterized by the development of cooperation for innovation. Obviously, cooperation is needed between companies, as well as ‘business world’ (it means investors) and academic researchers. Examples for that statement are implementation of different projects, involving clusters and participation in pro-innovative European Union networks and platforms. Participants have a task to lead to the development of innovative capacity and sharing resources for the development and implementation of innovative processes and products, protection and transfer of intellectual property rights, such as copyrights and license royalties, and commercialization of the results.

Also, mutual cooperation could be supported through the development of technology transfer entities, agencies and technology centers, for example. Support will focus on science-business relationship management, intellectual property rights, researchers’ awareness regarding intellectual property rights and commercialization.

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### RELEVANTNOST REGULISANJA INOVACIJA SA IZAZOVIMA INFORMACIONE TEHNOLOGIJE I KONKURENCIJE

*Intelektualna svojina je direktno povezan sa pravom konkurencije. Sa druge strane, neophodno je znati da inovacije kao deo prava intelektualne svojine predstavljaju značajan element aktivnosti kompanija, ukoliko žele da budu konkurentne na tržištu. To je razlog zašto je moguće reći da zakoni o konkurenciji pripadaju pravilima ekonomskih odnosa. Zakonodavno regulisanje je važno za kompanije u smislu da promoviše ekonomsku efikasnost. Konkurentnost je sposobnost regiona da izvozi više u odnosu na dodatu vrednost u odnosu na uvoz. Ta definicija je veoma važno za preduzeća i za investitore u isto vreme. Zbog toga vlade država moraju obratiti pažnju na sve takozvane popuste, uključujući veštački nizak kurs valute, iznenađujući naknade u sektoru izvoza, veštački niske stope poreza i direktne pomoći izvozu. Vlade, kao i zakonodavci, moraju kontrolisati barijere i prepreke, u cilju poboljšanja mera koje bi eliminisale te prepreke. To bi bio veoma važan znak za investitore. Takođe, prava intelektualne svojine pokazuju svoj značaj putem razvoja politike konkurencije koja se odnosi na kompanije. Cela Evropa ulaže u razvoj istraživanja, fokusirajući se na najvažnije učesnike. Zbog tog zadatka, učesnici su posebno zainteresovani za učešće privatnih investicija u oblasti istraživanja.*

Ključne reči: *inovacije, konkurencija, regulativa, kompanije, investitori*