

**Deloitte.**

# Analysis of prospective economic effects related to the implementation of the system of unitary patent protection in Poland



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# 1. Summary

Deloitte, commissioned by the Ministry of Finance, developed a study “Analysis of prospective economic effects related to the implementation of the system of unitary patent protection in Poland”<sup>1</sup>. The analysis of costs and benefits resulting from the unitary patent protection for Polish companies, which is the subject-matter of this study, relates to present provisions of the proposal for the European patent with unitary effect (hereinafter also “the unitary European patent”).

The European Parliament has not decided yet about legality of some of the provisions included in the proposals for regulations on the unitary patent protection system. Concurrently, a complaint has been filed with the Court of Justice of the European Union against a decision of the Commission dated March 2011 authorizing implementation of enhanced cooperation. The outcome of these proceedings will also influence proposed solutions. On the date of publishing of this report the outcome of the proceedings is not known.

The aim of this analysis is to determine prospective economic, financial and social results for Poland, specifically for small and medium-sized enterprises should the system of unitary patent protection comprising:

1. Proposal for a Regulation of the European Parliament and the Council implementing enhanced cooperation in the area of the creation of unitary patent protection.
2. Proposal for a Council Regulation implementing enhanced cooperation in the area of the creation of unitary patent protection system with regard to the applicable translation arrangements.
3. Draft international Agreement on a Unified Patent Court

be implemented in Poland.

The system provides for a maximum 7-year transitional period for the Agreement on a Unified Patent Court and a maximum 12-year transitional period for the proposals for regulations. The unitary European patent will comprise, as it has been assumed, 25 EU states (except for Spain and Italy, which did not accede to the enhanced cooperation), and it will not require validations in specific Member States; therefore, the costs of obtaining such patent will be lower than the present costs of obtaining a European patent. Patent applications will be filed in national languages with a translation thereof into English, German or French. The European Patent Office is now developing a system of automatic translations which is aimed to assist in perusing the office databases and translations of patent documentation so as to render them informative. All court cases related to the unitary European patent will be decided by one court – the Unified Patent Court. The central division of the Court of First Instance will be in Paris, Munich and London, whereas Member States will be able to create regional or local divisions of the first instance court.

Because Poland is a member of the European Patent Organization, Polish businessmen or inventors apply for patents in the European Patent Office (EPO). In 2011 businesses registered in Poland filed 247 European patent applications, whereas 45 patents were granted protection. It is a scarce number of all applications filed and patents granted by the EPO - respectively 0.19% of the applications filed and 0.07% of the patents granted by the EPO. Germany, the United States, Japan, Italy and the United Kingdom are leaders in obtaining European patents. Patents obtained by the applicants from those countries constitute as much as 88% of all the patents granted by the EPO in 2011.

In 2011 there were 38 000 patents and utility designs in force in Poland, whereas in the same period almost 570 000 European patents were valid. Only a small part of those patents were validated in Poland (5 790 patents validated in Poland in 2011, 31% of which are German patents, whereas in 2011 the EPO granted over 62 000 patents). The main entities that obtain patent protection in Poland are universities and research

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<sup>1</sup> This paper was drafted within 6 weeks from the date of signing an agreement.

institutes. It is mainly big companies operating in the area of electronics, telecommunications, household appliances production and automotive industry that are granted the European patent.

Within the framework of the conducted cost/benefit analysis of the proposed solution, i.e. creation of the unitary patent protection system in the European Union, two possible options of how to act have been adopted, i.e.:

- Option 0. Non-implementation of the unitary patent in Poland and non-accession to the Agreement on the Unified Patent Court. We assume that the system of the European patent with unitary effect will be created and will include EU 24 Member States<sup>2</sup> (except for Poland, Spain and Italy). **In such case Polish businesses will still be able to enjoy national protection, European patent and validation thereof and a solution provided by the unitary European patent.**
- Option 1. Implementation of the unitary patent in Poland and accession to the Agreement on the Unified Patent Court. In such case we assume that the system will include EU 25 Member States (except for Spain and Italy). **Polish businesses will still be able to enjoy national protection, European patent and validation thereof, and a solution provided by European patent with unitary effect.** At the same time the State budget will receive additional financial means connected with fees paid to the European Patent Office a part of which will be distributed among Member States participating in the system of the European patent with unitary effect.

It has been stated above that both option 0 and option 1 provide for access to the system for Polish businesses. It needs to be noted that non-implementation of the system of the European patent with unitary effect in the European Union may entail loss of benefits (which accompany both option 0 and option 1) which result from lower costs of implementation of patents in the EU or lack of additional State budget revenues. Such loss of benefits for businesses relates, however, only to those businesses which are interested in utilizing the Unified European Patent System as applicants and entities granted patents in many EU countries.

The analysis of costs and benefits has been prepared from two different time perspectives:

- 20-year perspective,
- 30 -year perspective.

Among entities interested in the proposed solution are:

- innovative businesses,
- exporting businesses,
- businesses from the sectors in which many patent applications are filed, with conscious entities applying patent strategies (e.g. pharmacy),
- patent attorneys,
- Patent Office,
- production companies<sup>3</sup>,
- R&D entities.

To calculate the costs and benefits the following methodological and substantive assumptions have been made:

1. Only those costs and benefits which differ between options have been taken into account. Therefore, it cannot be assumed that all possible costs and benefits have been considered for each option.

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<sup>2</sup> The creation of the system requires that the Agreement on the UPC be ratified by 13 EU Member States.

<sup>3</sup> The analysis takes into account only production businesses because of a direct impact. Due to the changes concerning implementation of a broader scope of patent protection, the analyzed solutions may also influence distribution and trade businesses. Nevertheless, the influence (e.g. of possible claims) on business activity they conduct is lesser than in case of production businesses.

2. Because it is difficult to indicate specific figures related to the anticipated number of patents and to the development of innovativeness of Polish businesses, a sensitivity analysis based on 3 scenarios has been introduced.
3. The fact of particular importance has been considered that even if Poland does not implement the unitary patent, and does not ratify the Agreement on a Unified Patent Court, Polish **businesses will be able to take advantage of the unitary European patent**, which - we assume - will be then in force in 24 countries (EU without Poland, Spain and Italy).
4. We have not considered a situation when the unitary European patent system is not implemented in any or in some of the above mentioned states.

The figures in the calculation are based on data (specifically obtained from the Central Statistical Office [Główny Urząd Statystyczny] and the European Commission, and from the interviews with businessmen), and they include a number of assumptions made according to the best knowledge of the Performer of the analysis. Because of that, all of the figures mentioned below are to be viewed as estimates.

It is assumed that the estimated numbers of European patents and unitary European patents will differ depending on the option. If Poland implements the unitary patent system (Option 1), all patents with unitary effect granted by the European Patent Office will be in force on the territory of our country. It is estimated that the number of those patents in force in Poland in 2033 will reach almost 900 thousand, whereas in 2043 – over a million. In such a situation, however, the majority of businesses will not be interested in validating a European patent in Poland because they will take the opportunity offered by the unitary European patent. However, if Poland does not accede to the unitary patent protection system (Option 0), in that case European patents will still be validated in Poland, however, they will come in more slowly than unitary patents. We assume that in the case of Option 0 the number of European patents validated in Poland will amount to over 350 thousand in 2033, and almost 450 thousand in 2043.

Polish businesses will have the opportunity of applying for a European patent with unitary effect, irrespective of whether or not we will accede to the unitary patent system (Option 1) or not (Option 0). It is projected that depending on the pace of development of innovativeness in Poland, the number of unitary European patents held by Polish businesses will range from 3 thousand to over 9 thousand in 2033, and from over 8 thousand to almost 38 thousand in 2043.

Below are benefits the amount of which does not depend on any option (Option 0 or Option 1):

- having monopoly on use of a patented product / solution,
- revenues from licences or from sale of inventions,
- advantage for the image,
- growth of innovativeness,
- possibility of commercializing of solutions by R&D entities,
- possibility of revoking patents in the EU,
- unification of regulations and interpretations thereof.

The budget revenues are the benefits the amount of which is different depending on the option. The estimated benefits in the form of budget revenues are higher in the case of Option 1 both in the period of 20 years and 30 years. The estimated difference<sup>4</sup> to the advantage of Option 1 is:

- PLN 0.7 billion within 20 years,
- PLN 1.3 billion within 30 years

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<sup>4</sup> The discounted value of benefits in a specified period. It is a sum of the values for each year, whereby for each year which follows the first year a discount of value for the year 1 was made at the discount rate 7,5%. More information on this subject in chapter 4.1. Methodology of cost/benefit analysis.

Below are the costs the amount of which does not depend on any option:

- costs of obtaining patents,
- costs of renewing patents.

The estimated costs the amount of which is different depending on the option are the costs of court proceedings, licence purchase, patent clearance searches and adjustment costs. Those are higher in the case of Option 1, both in the period of 20 years and 30 years. Resignation from Option 0 and introduction of Option 1 will result in that the estimated costs<sup>5</sup> for the economy will be higher by:

- PLN 53.0 billion within 20 years
- PLN 79.4 billion within 30 years.

The consequences of choosing an option should be determined by the net effect which is a result of subtracting costs from benefits. An estimated net effect is more beneficial in the case of Option 0. Resignation from Option 0 and introduction of Option 1 will lead to the following estimated additional costs<sup>6</sup> for the economy:

- PLN 52.3 billion within 20 years
- PLN 78.1 billion within 30 years.

Taking into account only those benefits and costs which differ between the options and the fact that even if Poland does not implement the unitary patent, and does not ratify the Agreement on a Unified Patent Court, Polish businessmen will be able to take advantage of a European patent with a unitary effect, which - we deem - will then be in force in 24 EU states (UE except for Poland, Spain and Italy), **according to the estimations, a more beneficial option is Option 0 (non-implementation of a unitary patent in Poland and non-accession to the Agreement on a Unified Patent Court)**, irrespective of a temporal perspective or a scenario of the development of innovativeness of Polish businesses.

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<sup>5</sup> The discounted value of costs in a given period.

<sup>6</sup> The discounted value of net effect in a given period.

## 2. Glossary of abbreviations

<b>CBA</b>	Cost/Benefit Analysis
<b>CATI</b>	Computer Assisted Telephone Interview
<b>EPO</b>	European Patent Office
<b>CJEU</b>	Court of Justice of the European Union
<b>CSO</b>	Central Statistical Office
<b>IDI</b>	In Depth Interview
<b>RDE</b>	Research & Development Entities
<b>UEP</b>	European patent with a unitary effect also unitary European patent
<b>UPC</b>	Unified Patent Court
<b>EPC</b>	European Patent Convention
<b>SMEs</b>	Small and Medium-Sized Enterprises
<b>REA</b>	Regulation Impact Assessment
<b>GDP</b>	Gross Domestic Product
<b>EU</b>	European Union
<b>EU 25</b>	European Union Member States without Italy and Spain
<b>PPO</b>	Polish Patent Office
<b>WIPO</b>	World Intellectual Property Organization

# 3. Introduction

## 3.1 European patent with unitary effect

European patent with unitary effect (also referred to as unitary European patent, abbreviated „UEP“) is a proposed system of patent property protection in the European Union which consists of the following acts of law:

1. Proposal for a Regulation of the European Parliament and the Council implementing enhanced cooperation in the area of the creation of unitary patent protection (hereinafter “Regulation on the unitary patent”).
2. Proposal for a Council Regulation implementing enhanced cooperation in the area of creation of unitary patent protection system with regard to the applicable translation arrangements (hereinafter “Regulation on translation arrangement”).
3. Draft international Agreement on a Unified Patent Court with a proposal for a Statute (hereinafter “Agreement on the UPC”).

The main aim of the proposed solution is reduction of costs of obtaining patent protection in the territory of the EU, unification of the interpretations of law by creating a unified system of judiciary, creating legal conditions which will enable businessmen to adjust production and distribution outside the country and will ensure them greater choice and more opportunities, and will serve to attain the EU objectives indicated in Art. 3(3) of the Treaty on European Union.

A discussion on the introduction of the UEP has continued for 30 years now. The disputes mainly concerned the seat of the Unified Patent Court (hereinafter “UPC”) and the language of granted patents. As a compromise, English, German and French have been adopted as equal, and the court will be seated in Munich, London and Paris. A central division of First Instance of the UPC and the Court President’s Office will be in Paris. It will also be possible to create regional or local courts.

Spain and Italy have undermined legality of enhanced cooperation. Those two countries have lodged complaints to the Court of Justice of the European Union to declare invalid the Commission decision of 10 March 2011 authorizing to undertake enhanced cooperation on account of it being against the Community law. The Court has not passed the judgment in this matter until now. Patents with a unitary effect will not be in force in those countries. However, it does not mean that residents of those countries will not be able to file applications for a unitary European patent.

The international Agreement on the UPC will be undertaken by the EU Member States (without Spain and Italy), but without jurisdiction of the Community as such. To take effect, the Agreement must be ratified by 13 Contracting Member States. Following ratification, regulations from “the patent package” will enter into force. In effect of such construction of the “patent package” a European patent for a specific invention is to exert a unitary effect in those EU states participating in enhanced cooperation which on the date of registration of a unitary effect (for this European patent) will have already been bound by the Agreement on the UPC. The construction of the patent system with a unitary effect as such causes controversy, especially among Polish lawyers. They emphasize that the system is not in line with the European Union law, the Polish Constitution



and the Polish Act on Common Courts. Therefore, Poland's accession to the unitary system of patent protection may require that national legislative acts<sup>7</sup> be amended.

At present Polish entities may file applications for patent registration under three independent procedures presented in the table below.

**Table 1. Patent procedures**

<b>1. National Procedure<sup>8</sup></b>
<ul style="list-style-type: none"> <li>• Conducted by the Polish Patent Office (hereafter the "PPO").</li> <li>• The granted protection is in force only in the Republic of Poland and it is exclusively subject to Polish law.</li> <li>• Potential disputes are resolved by Polish courts.</li> </ul>
<b>2. Regional procedure (European patent)</b>
<ul style="list-style-type: none"> <li>• Conducted before the European Patent Office (hereinafter "EPO") under the European Patent Convention (hereinafter "EPC").</li> <li>• European patent is a "bunch" of national patents, i.e. is valid in those European countries<sup>9</sup> which will be designated by an applicant and where validation is made before a national patent office. Subsequently the patent is subject to the laws of those states.</li> <li>• Claims e.g. ensuing from infringement of rights in the European patent are enforced in individual states where the patent is in force under the laws of those states.</li> </ul>
<b>3. International procedure</b>
<ul style="list-style-type: none"> <li>• Conducted under the Patent Cooperation Treaty ("PCT"), facilitates concurrent application for protection of an invention in many countries.</li> <li>• Currently, there are 139 countries under the PCT. From among 139 countries an applicant designates those where he would like to be granted protection. Each international application, following fulfilment of required formalities in each of the designated/chosen states has the same effect as a national application and is subject to national law.</li> </ul>

Source: own work

The above procedures will be in force also in case the unitary patent protection system is implemented, none of those will be withdrawn.

This study requires a more comprehensive comparison of two procedures: - a European patent which is now in force (hereinafter also "European patent") and a European patent with unitary effect (the UEP). Below are selected solutions in both these systems which may be of major importance to Polish businesses and their operating in domestic or international markets.

<sup>7</sup> An open letter in the matter of the unitary patent protection and the Unified Patent Court, Prof. zw. dr hab. h.c. Stanisław Soltysieński, Prof. zw. dr hab. Ryszard Markiewicz, Prof. zw. dr hab. Andrzej Szajkowski, Prof. of Adam Mickiewicz University dr hab. Aurelia Nowicka, Prof. zw. dr hab. Janusz Szwaja, Prof. zw. dr hab. Ryszard Skubisz, the letter is available at the website of the Polish Chamber of Patent Attorney [http://www.rzecznikpatentowy.org.pl/nie\\_dla\\_pat\\_jed/List\\_otwarty\\_projekt.24.5.2012.pdf](http://www.rzecznikpatentowy.org.pl/nie_dla_pat_jed/List_otwarty_projekt.24.5.2012.pdf)

<sup>8</sup> Depending on the choice made by an inventor, an application may also be filed directly with a patent office in other state/states on condition that all formal requirements are met, official language of the state is used and appropriate costs are incurred.

<sup>9</sup> Presently there are 30 member states under the European Patent Convention – the Polish Patent Office, <http://www.uprp.pl/procedura-regionalnawstep/Lead05,27,2837,4,index.pl,text/>

**Table 2. Comparison of the European patent and the proposed solutions as regards the UEP**

European patent	Unitary European patent <sup>10</sup>
Patent granting entity	
<ul style="list-style-type: none"> <li>The European Patent Office</li> </ul>	<ul style="list-style-type: none"> <li>The European Patent Office</li> </ul>
Party entitled to file patent applications	
<ul style="list-style-type: none"> <li>lack of territorial constraint. European patent application may be filed by any natural person, a legal person or an entity equal to a legal person under the law to which it is a subject<sup>11</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>lack of territorial constraint. European patent application may be filed by any natural person, a legal person or an entity equal to a legal person under the law to which it is a subject<sup>12,13</sup>.</li> </ul>
Place of filing patent applications	
<ul style="list-style-type: none"> <li>directly with the EPO</li> <li>Via a national Patent Office<sup>14</sup></li> </ul>	<ul style="list-style-type: none"> <li>directly with the EPO</li> <li>Via a national patent office<sup>15</sup></li> </ul>
Language of patent applications	
<ul style="list-style-type: none"> <li>English or German or French or an applicant's official language with translation into one of the EPO official languages<sup>16</sup>.</li> <li>A discount on a fee for filing an application, examination, opposition or appeal is available for an applicant who is a natural person or a legal person residing or being headquartered in the territory of a contracting state, the official language of which is other than English, French or German, and for citizens of that state residing abroad (at present the discount is 20% on total fees)<sup>17</sup></li> </ul>	<ul style="list-style-type: none"> <li>English or German or French or an official language of an applicant with translation into any of the EPO official languages.</li> <li>Art. 5 of the Proposal for Regulation on translation arrangements provides for reimbursement of costs to SMEs which have filed a European patent application in one of the EU official languages which is not an official language of the EPO and which reside or are headquartered in a Member State. The amounts to be reimbursed are not known (100% or partial return only).</li> </ul>

<sup>10</sup> It must be taken into account that the presented provisions of the Regulation on the unitary patent and the Regulation on translation arrangements, and the Agreement and on a Unified Patent Court and Regulations thereof are drafts and proposals, and do not have the binding legal force.

<sup>11</sup> Art. 58 of Convention on the Grant of European Patents (the European Patent Convention), drafted in Munich on 5 October 1973, amended by the Act revising Art. 63 of the Convention dated 17 December 1991, and by decisions of the Administrative Council of the European Patent Organization dated 21 December 1978, 13 December 1994, 20 October 1995, 5 December 1996 and 10 December 1998, with the protocols which are integral parts thereof (DZ.U. [Official Journal] dated 26 April 2004).

<sup>12</sup> Art. 58 of Convention on the Grant of European Patents (the European Patent Convention), drafted in Munich on 5 October 1973, amended by the Act revising Art. 63 of the Convention dated 17 December 1991, and by decisions of the Administrative Council of the European Patent Organization dated 21 December 1978, 13 December 1994, 20 October 1995, 5 December 1996 and 10 December 1998, with the protocols which are integral parts thereof, (Dz. U. [Official Journal] dated 26 April 2004).

<sup>13</sup> Unitary patent protection should be available for European patent holders both in the participating member states and other states, irrespective of nationality, place of residence or place of business (item 2 of the Preamble of the Proposal for Regulation on unitary patent).

<sup>14</sup> Under Art. 75.1 of the European Patent Convention.

<sup>15</sup> See footnote 14.

<sup>16</sup> If a patent application is filed by a Polish entity in Polish, the text in Polish shall be the authentic text of the application - Art. 70.2 of the European Patent Convention.

<sup>17</sup> The Implementing Regulations; rule 6.3.

European patent	Unitary European patent <sup>10</sup>
<ul style="list-style-type: none"> <li>In the above circumstances, if patent protection under a European patent is sought in Poland by e.g. a German entity, it has to submit a translation of patent description, patent claims and figures into Polish thus validating the patent in Poland.</li> </ul>	
Language of patent description and patent claims	
<ul style="list-style-type: none"> <li>An obligation of filing a Polish translation of a patent description and patent claims with the Polish Patent Office if an applicant intends to validate the patent in Poland.</li> <li>The deadline for submitting translation elapses after three months from the date of publication of information on European patent grant or renewal of amended European patent in the European Patent Bulletin provided that some state does not fix a longer deadline.</li> </ul>	<ul style="list-style-type: none"> <li>Ultimately, a description of European patent with a unitary effect submitted in EPO in one of the three official EPO languages does not require translation (different provisions govern a transitional period)<sup>18</sup></li> <li>Patent description and patent claims will not be translated into Polish.</li> <li>Only in case of a court dispute concerning a potential infringement of a European patent with a unitary effect will patent proprietor be required to submit a translation into an official language of the participating Member State where the alleged infringement took place or of a Member State in which an alleged infringer is domiciled<sup>19</sup>.</li> <li>In the event of a dispute concerning claim for damages, the court which hears the dispute shall consider - in particular - where the alleged infringer is an SME, a natural person or a non-profit organization, university or a public research organization - whether the alleged infringer acted without knowing or without reasonable grounds to know that he was infringing the European patent with unitary effect before having been provided with the translation referred to above<sup>20</sup>.</li> </ul>
Scope of patent protection	
<ul style="list-style-type: none"> <li>Designates patent holder's monopoly mainly indicated in patent claims<sup>21</sup>.</li> </ul>	Patent description and patent claims will be available in English, German and French. Validation of patent will

<sup>18</sup> Art. 3 of the Proposal for Regulation on translation arrangements provides that if a description of a European patent with unitary effect is published, no further translations of it are required.

<sup>19</sup> This language version is not, however, legally binding.

<sup>20</sup> Art. 4.4 of the Proposal for Regulation on translation arrangements.

<sup>21</sup> Art. 69 of the European Patent Convention. The extent of the protection conferred by a European patent or a European patent application shall be determined by the claims. Nevertheless, the description and drawings shall be used to interpret the claims.

European patent	Unitary European patent <sup>10</sup>
<ul style="list-style-type: none"> <li>The scope of patents validated in Poland is, above all, determined by a translation of the patent published by the Polish Patent Office. Entities for which English, French or German is not an official language have also been provided with a supplementary protection consisting i.a. in that where the scope of a European patent indicated in the translation thereof is narrower than the scope of patent determined by a language of proceedings before the European Patent Office, the translation of the patent<sup>22</sup> is deemed to be an authentic text of an European patent, except for European patent revocation proceedings.</li> <li>Protection of interests of Polish businesses is also stipulated in Art. 67 (3) of the EPC<sup>23</sup>.</li> </ul>	<p>not be required; consequently, no translation of a patent description and patent claims into e.g. Polish will be required. Following introduction of machine translation system, it will be possible to translate patent description and patent claims into Polish, but such translation should serve for information purposes only and should have no legal effect.</p>
Content of patent	
<ul style="list-style-type: none"> <li>By obtaining a European patent in which Poland was designated as a country of protection one obtains the same rights as in case of a patent granted under the Industrial Property Law Act, i.e., a patent holder may prevent a third party from use of an invention without his consent for profit or for professional purposes which consists in:</li> <li>manufacturing, using, offering, marketing or importing a product which is the subject matter of the invention for those purposes</li> <li>using a process which is the subject matter of invention, and using, offering, marketing or importing for those purposes of products obtained by that process<sup>24</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>A European patent with unitary effect will have a broader scope than a European patent, authorizing a patent holder also to store and use indirectly the invention.</li> </ul> <p>In comparison to the present system, the protection has been extended to:</p> <ol style="list-style-type: none"> <li>storing of a product for the purposes of manufacturing, offering, marketing or using and also importing,</li> <li>storing of a product for the purposes of offering, marketing, using or importing of the product obtained directly by using a process of manufacture which is the subject matter of a patent,</li> <li>the so-called indirect infringement (European</li> </ol>

<sup>22</sup> Art. 7.2 of the Act on the Filing of European Patent Applications and Effects of the European Patent in Poland dated 14 March 2003 (Official Journal no. 65, item 598, as amended)

<sup>23</sup> Art. 67 of the European Patent Convention states: (1) A European patent application shall, from the date of its publication, provisionally confer upon the applicant the protection provided for by [Article 64](#), in the Contracting States designated in the application. (2) Any Contracting State may prescribe that a European patent application shall not confer such protection as is conferred by [Article 64](#). However, the protection attached to the publication of the European patent application may not be less than that which the laws of the State concerned attach to the compulsory publication of unexamined national patent applications. In any event, each State shall ensure at least that, from the date of publication of a European patent application, the applicant can claim compensation reasonable in the circumstances from any person who has used the invention in that State in circumstances where that person would be liable under national law for infringement of a national patent. Any Contracting State which does not have as an official language the language of the proceedings may prescribe that provisional protection in accordance with [paragraphs 1 and 2](#) above shall not be effective until such time as a translation of the claims in one of its official languages at the option of the applicant or, where that State has prescribed the use of one specific official language, in that language: (a) has been made available to the public in the manner prescribed by national law, or (b) has been communicated to the person using the invention in the said State.

<sup>24</sup> Art. 6.1 of the Act on Filing European Patent Applications and Effects of European Patent in Poland dated 14 March 2003 (Dz. U. [the Official Journal] no. 65, item 598, as amended) and Art. 66 of the Industrial Property Law Act dated 30 June 2000 (consolidated text: Dz.U. [the Official Journal] of 2003, no. 119, item 1117, as amended).

European patent	Unitary European patent <sup>10</sup>
	<p>patent with a unitary effect authorizes a patent holder to prohibit any third party who does not have consent of the holder to supply or offer to supply means that relate to a crucial element of the invention to any entity other than the person authorized to use an invention protected by a patent in contracting states in which a patent has a unitary effect)<sup>25</sup>.</p>
Validation	
<ul style="list-style-type: none"> <li>Validation is required in each state where a patent holder intends to obtain protection for an invention<sup>26</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>A patent is “automatically” valid in 25 states participating in the enhanced cooperation (the UE without Spain and Italy). An application for registration of a unitary effect shall be filed with the EPO within one month from publishing the information on the patent grant in the European Patent Bulletin<sup>27</sup>.</li> </ul>
Territorial scope	
<ul style="list-style-type: none"> <li>The states where the applicant validated the patent<sup>28</sup> (to be chosen from 38 European states, including all EU states).</li> </ul>	<ul style="list-style-type: none"> <li>European patent for a certain invention is to have a unitary effect in those EU states participating in the enhanced cooperation, which on the date of registration of a unitary effect (for this specific European patent) will have already been bound by the Agreement on a Unified Patent Court<sup>29</sup>.</li> </ul>
Maintenance of a patent	
<ul style="list-style-type: none"> <li>The PPO charges renewal fees for protection of an invention for which a European patent was granted starting from the year that follows the year in which the EPO published information on the patent grant<sup>30</sup>. The fees are the same as in case of national patents.</li> </ul>	<ul style="list-style-type: none"> <li>The amount of fees for maintaining patents in force is determined at the level               <ul style="list-style-type: none"> <li>a) which is equal to the level of the renewal fee paid for protection which is currently ensured by European patents of an average geographic extent (European patents are validated on average in 5-6 countries),</li> </ul> </li> </ul>

<sup>25</sup> Art. 7 of the Proposal for Regulation on unitary patent

<sup>26</sup> 12 Member States of the European Union acceded to an international agreement, i.e. the London Agreement which aims to relax the requirement for submission of translations of European patent descriptions. (The Agreement on the application of Article 65 of EPC, the Official Journal of EPO dated 2001, no. 12). Four states – parties to this Agreement: France, Germany, Luxembourg and the United Kingdom waived the requirement for translations, the remaining 8 states partly waived the requirement for submission of translations, i.e. they still require translations of patent claims into their official languages, whereas in some of them it is required to submit translations of a patent description into English if the language of the proceedings before the EPO was French or German

<sup>27</sup> In accordance with Art. 12 a) of the Proposal for Regulation on the unitary patent.

<sup>28</sup> Currently there are 38 member states of the European Patent Organization, including all the EU Member States. The list of the member states with the dates of accession to European Patent Organization is available at the EPO website at: <http://www.epo.org/about-us/organisation/member-states/date.html>

<sup>29</sup> Art. 22.2 of the Proposal for the Regulation on unitary patent.

<sup>30</sup> In accordance with Art. 8.1 of the Act on the filing of European patent applications and effects of European patent in Poland dated 14 March 2003 (Dz. U [the Official Journal] no. 65, item 598, as amended).

European patent	Unitary European patent <sup>10</sup>
<ul style="list-style-type: none"> <li>Polish entities which hold a European patent pay renewal fees for a patent to relevant patent offices of the state where the patent was validated; their amount is determined by those states<sup>31</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>b) which reflects an indicator of maintenance of the present European patents, and</li> <li>c) which reflects the number of applications for registration of a unitary effect<sup>32</sup>.</li> </ul>
The courts and court disputes	
<ul style="list-style-type: none"> <li>Under Art. 64 of the EPC the content of a European patent is subject to national law<sup>33</sup>.</li> <li>If Poland should sign the Unified Patent Court Agreement, a patent holder will have an opportunity to choose the UPC jurisdiction for a European patent in a transitional period.</li> <li>After the transitional period the disputes relating to the European patents will be decided before the UPC.</li> </ul>	<ul style="list-style-type: none"> <li>Court cases will be decided before the Unified Patent Court</li> </ul>
Revocation	
<ul style="list-style-type: none"> <li>Only in a state where a patent was revoked.</li> </ul>	<ul style="list-style-type: none"> <li>A European Patent with unitary effect may be limited, assigned or revoked or it may expire only in relation to all participating Member States<sup>34</sup>.</li> </ul>
Unification of law, interpretations and case-law in the same cases in the EU	
<ul style="list-style-type: none"> <li>No Pending disputes are conducted by national courts in accordance with the law in force in that state. There are discrepancies among the states, e.g. with regard to interpretation of the scope of patent claims<sup>35</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>Yes There is a possibility of unification of interpretation of patent law and court practice<sup>36</sup>.</li> </ul>

Source: own work

<sup>31</sup> In some states representation by a patent attorney is mandatory, there are different deadlines and methods of payment of fees for patent maintenance (e.g. in some countries payments can be made personally, via a post office, by bank transfer, directly in a patent office, etc.): the Assessment of the Effects of the European Commission Regulation dated 15 April 2011 (9224/11 ADD 2).

<sup>32</sup> Under Art. 15.3 of the Proposal for the Regulation on the unitary patent.

<sup>33</sup> Rules on jurisdiction are governed by the Council Regulation (EC) No 44/2001 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters dated 22 December 2000 (The Official Journal of the European Community L 12 dated 16 January 2001).

<sup>34</sup> Art. 3.2 of the Proposal for the Regulation on the unitary patent.

<sup>35</sup> Prof. Aurelia Nowicka in the paper „Kontrowersje dotyczące utworzenia jednolitej ochrony patentowej oraz jednolitego sądu patentowego”. [“Controversy on the creation of unitary patent protection and the unified patent court.”] The legal analysis (dated 27 January 2012) points out that despite the efforts of the courts of Member States attempting for some time now to approximate practices determining the scope of a European patent, they have failed to work out a unitary and coherent rule for interpretation of patent claims.

<sup>36</sup> Panels of judges will be multinational, and judges will be from those states which operate under different legal systems. For those reasons it must be pointed out that unification of interpretation of legal provisions and the practice of courts may take many years.

### 3.1.1. Court cases decided by the Unified Patent Court

The Unified Patent Court will be established on the basis of an international Agreement on a Unified Patent Court concluded between the Member States of the European Union. The draft Agreement includes proposed regulations for the mentioned court. It has to be emphasized that detailed provisions of the draft Agreement are still subject to change.

It results from the draft Agreement that a Unified Patent Court will have exclusive competence in matters of infringement and revocation of a unitary patent and pursuit of other claims by a holder of a patent with a unitary effect. The UPC's jurisdiction was indicated in Art. 15 of the draft Agreement. This Article stipulates that the UPC shall have exclusive competence in the matters of:

- a. actual or threatened infringements of patents and supplementary protection certificates and related defences, including counterclaims concerning licences;
- b. declarations of non-infringement of patents;
- c. provisional and protective measures and injunctions;
- d. revocation of patents;
- e. counterclaims for revocation of patents;
- f. damages or compensation derived from the provisional protection conferred by a published European patent application;
- g. use of the invention prior to the granting of the patent or to the right based on prior use of the invention;
- h. compensation for licences on the basis of Article 11 of Regulation implementing enhanced cooperation in the area of the creation of a unitary patent protection (open licences);
- i. decision of the European Patent Office in carrying out the tasks referred to in Article 12 of Regulation implementing enhanced cooperation in the area of creation of a unitary patent protection.

The national courts of the contracting states shall have competence in other matters regarding patents that fall outside the competence of the UPC. All disputes regarding failure to perform or improper performance of licence agreements shall be resolved by competent national courts. The only exception shall be the lawsuits for payment the basis of which will be an open licence for a patent with a unitary effect granted under Art. 11 of the Regulation implementation of enhanced cooperation in the area of the creation of a unitary patent protection.

The Unified Patent Court shall include:

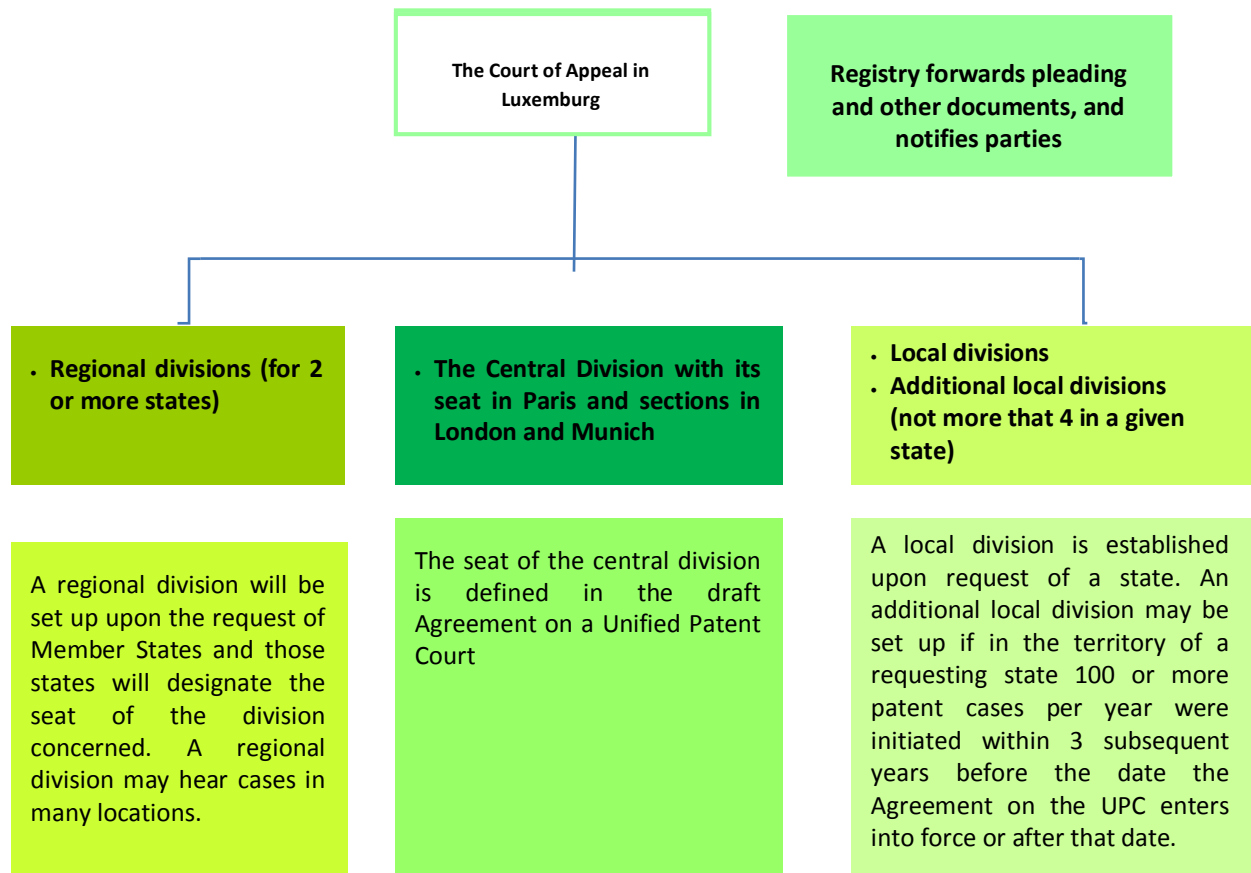
- The Court of First Instance
- The Court of Appeal,
- The Registry.

It must be emphasized that the central division will be exclusively competent in respect of:

- declarations of non-infringement,
- revocation of patents which will not be connected with lawsuits for infringement.

Appeals against decisions of the Court of First Instance shall be brought before the Court of Appeal seated in Luxembourg.

**Diagram 1. Structure of the Unified Patent Court**



**Court functioning costs (choice of a seat, relevant infrastructure) will be borne by those countries which have applied for their establishment in their territories.**

Source: Own work

### **Language of the proceedings before the Court of First Instance and before the Appeal Court<sup>37</sup>**

The language of proceedings before any local or regional division of the Unified Patent Court shall be an official European Union language which is the official language of the state hosting a local division or one of the official languages designated by states sharing a regional division.

In case of proceedings before a local or regional division of the Unified Patent Court of First Instance, the parties may agree on the use of a language in which the patent was granted (subject to approval by the panel;

<sup>37</sup> Additional facilitation on translation arrangements derives from Art. 31 of the Draft Agreement on the UPC. Under Art 31.3 a defendant in the central division of the UPC of First Instance in a case concerning patent infringement may demand translations of relevant documents into the language of a member state which is the party to the Agreement in which it is seated, has principal place of business or conducts business where: the jurisdiction of the central division derives from the provisions of Art. 15a (1) and the language of proceedings in the central division in not the official language of the EU Member State in which it is seated, has principal place of business or conducts business, and the defendant does not communicate in the language of the proceedings to a sufficient extent.



if the panel does not approve their choice, the parties may request that the case be referred to the central division). At the request of one of the parties and after having heard the other party and the competent panel, the President of the Court of First Instance may, on grounds of fairness, and taking into account all relevant circumstances, including the position of parties, in particular the position of the defendant, decide on the use of the language in which the patent was granted as the language of proceedings. In this case the President of the Court of First Instance shall assess the need for specific translation and interpretation arrangements. In the central division, however, (e.g. in actions for declaration of non-infringement) the language of the proceedings will be the language in which the patent was granted.

The language of proceedings in the Court of Appeal shall be the language of proceedings before the Court of First Instance. The parties may agree on the use of the language in which the patent was granted as the language of proceedings.

### **Composition of the panel of judges**

Any panel will have a multinational composition. In a panel, except for legally qualified judges, if such necessity arises, there will also sit technically qualified judges with qualifications and experience in the field of technology concerned. Any panel of the Court of First Instance will sit in a composition of three judges among whom at least one judge will be a national of the Contracting Member State. In the Court of the Second Instance a panel will be composed of five judges where each judge will be from a different Contracting Member State.

### **Competence of individual divisions**

Under the draft Agreement on the UPC actions shall be brought to<sup>38</sup>:

- the local division of the UPC of the First Instance hosted by the Contracting Member State where the actual or threatened infringement has occurred or may occur, or to the regional division in which that Contracting Member State participates; or
- the local division of the UPC of the First Instance hosted by the Contracting Member State where the defendant or - in the case of multiple defendants - one of the defendants has its residence or principal place of business, or in the absence of residence or principal place of business - place of business, or the regional division in which that Contracting Member State participates.

Actions against defendants having their residence or principal place of business outside the territory of the Contracting Member States or, in the absence of residence or principal place of business, will be brought before the local or regional division of the UPC of the First Instance in the territory of the Contracting Member State where the actual or threatened infringement has occurred or may occur, or to the regional division in which that Contracting Member State participates. If the Contracting Member State concerned does not host a local division and does not participate in a regional division, actions shall be brought before the central division.

A counterclaim for revocation may be brought in the case of an action for infringement. The local or regional division will, after having heard the parties, have the discretion either to:

- a. proceed with both the action for infringement and with the counterclaim for revocation and request the President of the Court of First Instance to allocate from the Pool of Judges a technically qualified judge with qualifications and experience in the field of technology concerned.
- b. refer the counterclaim for revocation for decision to the central division of the UPC of the First Instance and suspend or proceed with the action for infringement; or

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<sup>38</sup> Art. 15a, 15b of the draft Agreement on the UPC.

- c. with the agreement of the parties, refer the case for decision to the central division.

Actions for declaration of non-infringement and revocation should be brought before the central division of the UPC of First Instance. If, however, an action for infringement between the same parties relating to the same patent has been brought before a local or a regional division, these actions may only be brought before the same local or regional division. If an action for revocation is pending before the central division, an action for infringement between the same parties relating to the same patent may be brought before any division. An action for declaration of non-infringement pending before the central division should be stayed if an infringement action between the same parties or between the holder of an exclusive licence and the party requesting a declaration of non-infringement relating to the same patent is brought before a local or regional division within three months of the date on which the action was initiated before the local or regional division.

Parties may agree to bring actions before the division of the UPC of First Instance of their choice, including the central division. Actions for revocation and counterclaim for revocation of a patent can be brought before the UPC without the applicant having to initiate proceeding before the EPO. Each party should notify the UPC of potential proceedings before the EPO. The UPC of First Instance may stay its proceedings when a rapid decision may be expected from the European Patent Office<sup>39</sup>.

If Poland does not accede to the Agreement on the UPC, this court will not have competence in Poland. However, if a Polish businessman infringes rights in a patent in the territory of a state which acceded to the Agreement on the UPC, action against the Polish businessman will be brought before the UPC.

The table below presents places which potentially host actions brought by or against a Polish businessman in two situations:

- a. Poland accedes to the Agreement on the UPC,
- b. Poland does not accede to the Agreement on the UPC, and the system will be in force in the remaining EU States (without Spain and Italy)<sup>40</sup>.

**Table 3. Possible place of court proceedings in the event of accession and non-accession of Poland to the Agreement on the Unified Patent Court**

Situation of the Polish businessman	Poland does not ratify the UPC Agreement	Poland ratifies the UPC Agreement
<b>The Polish businessman has infringed rights stemming from a patent with unitary effect in the territory of a state bound by the Unified Patent Court Agreement (outside Poland)</b>	In the transitional period, a lawsuit against the Polish businessman may be filed with a court of a state where the infringement of a European patent took place or with the UPC (depending whether a patent holder has used an <i>opt-out</i> option outlined further in the report). After the transitional period a	A lawsuit against the Polish businessman may be filed with a local or regional division of the Court of First Instance of the UPC of a state in which the infringement took place (proceedings will be in the language of that state where the division is located) or with the local division in Poland which has

<sup>39</sup> The United Kingdom is among the states which were against the provisions of the Agreement on the UPC on the possibility for local or regional divisions to decide on a place of further proceedings in cases concerning counterclaim for revocation. There the matters of patent infringement or revocation are resolved jointly, whereas e.g. in Poland, Germany, Austria the same cases are resolved separately, i.e. patent infringements are resolved in common courts while matters for revocation in patent offices. There is a risk that some entities bringing actions may be tempted to choose the court which is not necessarily the most competent in terms of jurisdiction, but due to the fact that the provisions on the collision of laws applied by this court will lead to the application of the law which is preferred by this entity.

<sup>40</sup> This table was based on the analyses of Prof. Aurelia Nowicka in „Jednolita Ochrona Patentowa i Jednolity Sąd Patentowy – Uwagi Krytyczne [“Unitary Patent Protection and Unified Patent Court” – Critical Comments]” (as of 27 June 2012) (supplemented on 5 July 2012), Rzecznik Patentowy 2-4 (69-71) April - December 2011 and Prof. Krystyna Szczepanowska-Kozłowska „Korzyści, szanse i zagrożenia wynikające z jednolitego systemu ochrony patentowej dla jednostek naukowych”, [“Benefits, opportunities, and threats resulting from the unitary patent protection system for scientific entities”], the Ministry of Science and Higher Education, Warsaw, 2012.

Situation of the Polish businessman	Poland does not ratify the UPC Agreement	Poland ratifies the UPC Agreement
	lawsuit against the Polish businessman will be filed with a local division of the Court of First Instance of the UPC of a state where the infringement took place (proceedings will be in the language of the state where the division is located) or with the central division (the Polish businessman will not be able to demand to be provided with translations referred to in the proposal for Regulation on translation arrangements) <sup>41</sup> .	jurisdiction over his place of business (proceedings in Polish) <sup>42</sup> .  It must be noted, however, that it is the claimant that indicates the location of the proceedings.  If a local division is not established in Poland, a lawsuit against the Polish businessman may be filed with the UPC's central division.
<b>The Polish businessman has infringed rights stemming from a patent with unitary effect in the territory of Poland</b>	A patent with unitary effect is not valid in Poland. If a patent with unitary effect has been validated in Poland as a European patent, a lawsuit against the Polish businessmen will be filed with Polish courts.	A lawsuit against the Polish businessman is filed with a local division of the First Instance of the UPC (proceedings in Polish). The Polish businessman may bring a counterclaim or action for revocation in this court.  In case of counterclaim for revocation the matter may be transferred to the central division without defendant's consent (then either English or German, or French will be the language of the proceedings); if a separate action is brought before a local division of the UPC, the language of proceedings will be Polish <sup>43</sup> .  If a local division of the UPC is not established in Poland, the Polish businessman may be sued in the central division of the UPC.
<b>The Polish businessman wants to revoke a patent with unitary effect<sup>44</sup></b>	In such situation the Polish businessman acts before the central division of the UPC of First Instance. The proceedings are conducted in English, German or French.	In such situation the Polish businessman acts before the central division of the UPC of First Instance. The proceedings are conducted in English, German or French.

<sup>41</sup> Art. 4 of the Proposal for Regulation on translation arrangements and under Art. 5.3 of the Regulation 2001/44: A person who is domiciled in one of the Member States may be sued in another Member State if the subject-matter of proceedings is a tortious act or an action similar to a tortious act or claims ensuing from such an act – by the court which has jurisdiction over the place where an event causing damage has occurred or may occur.

<sup>42</sup> On the basis of: Szczepanowska-Kozłowska Krystyna, "Korzyści, szanse i zagrożenia wynikające z jednolitego systemu ochrony patentowej dla jednostek naukowych". ["Benefits, opportunities and threats resulting from the unitary patent protection system for scientific entities"], the Ministry of Science and Higher Education. 2012

<sup>43</sup> Szczepanowska-Kozłowska Krystyna, "Korzyści, szanse i zagrożenia wynikające z jednolitego systemu ochrony patentowej dla jednostek naukowych". ["Benefits, opportunities and threats resulting from the unitary patent protection system for scientific entities"], the Ministry of Science and Higher Education, 2012, p. 39

<sup>44</sup> In case of revocations which are not related to actions for infringement.

Situation of the Polish businessman	Poland does not ratify the UPC Agreement	Poland ratifies the UPC Agreement
<b>An entity from the state which is bound by the Agreement on the UPC has infringed rights stemming from a unitary patent of which a Polish entity is the holder</b>	The Polish businessman may sue the infringing entity either in a state in which the infringement took place or in a state where the entity has its place of residence, or where it is based or where it conducts business. If the infringement took place in the territory where a local or regional division of the UPC of First Instance has not been established, a central division will have jurisdiction.	The Polish businessman may sue the infringing entity either in a state in which the infringement took place or in a state where the entity has its place of residence, where it is based or where it conducts business. If the infringement took place in the territory where a local or regional division of the UPC of First Instance has not been established, and the sued entity is based in a state where no local division of the UPC has been established, it is possible to file a lawsuit with the central division <sup>45</sup> .

Source: own work

According to Professor Krystyna Szczepanowska-Kozłowska<sup>46</sup> and Professor Aurelia Nowicka<sup>47</sup> the proposed regulations are unclear in many aspects and may cause problems of proper interpretation, specifically:

- choice of the governing law under which the lawsuit will be assessed (provisions of the Agreement on the UPC and the Regulations or the national law),
- application of many law systems in the same case before the UPC,
- appointment of panel of judges composed of judges that apply different legal systems in their countries (continental, precedent).

### 3.1.2. Transitional period

Both the proposals for Regulations and the draft Agreement on the Unified Patent Court provide for transitional periods which are expected to assist Member States in accommodating into the new system.

#### The transitional period relating to the Unified Patent Court

In those Member States which will ratify the Agreement on a Unified Patent Court European patents will be subject to the jurisdiction of the Unified Patent Court, likewise European patents with unitary effect. However, during the transitional period lasting not more than seven years, proceedings for infringement or revocation of European patents may be initiated before national courts or other competent bodies of the contracting Member States which have jurisdiction of the national law.<sup>48</sup>

After five years from the date on which the Agreement on the UPC enters into force, the Administrative Committee<sup>49</sup> will conduct extensive consultation with users of the patent system to determine the number of European patents in respect of which the infringement or revocation proceedings are still initiated before

<sup>45</sup> The central division would have jurisdiction also where an infringer is from a state which is not the party to the Agreement on the UPC.

<sup>46</sup> Szczepanowska-Kozłowska Krystyna, "Korzyści, szanse i zagrożenia wynikające z jednolitego systemu ochrony patentowej dla jednostek naukowych". ["Benefits, opportunities and threats resulting from the unitary patent protection system for scientific entities"], the Ministry of Science and Higher Education, 2012

<sup>47</sup> Nowicka Aurelia, "Jednolita ochrona patentowa i jednolity sąd patentowy – uwagi krytyczne". ["The Unitary Patent Protection and the Unified Patent Court - Critical Comments."] Adam Mickiewicz University in Poznań, 2012

<sup>48</sup> In accordance with Art. 58 of the draft Agreement on the UPC which introduces an „opt out” option in the exclusive competence of the UPC.

<sup>49</sup> In accordance with Art. 9 of the draft Agreement on the UPC, the Administrative Committee, the Budgetary Committee, the Advisory Committee shall be established to guarantee effective implementation of the provisions of the Agreement.

national courts, and to learn about the causes and effects of the situation. On the basis of those opinions and the opinions of the UPC, the Administrative Committee may decide whether to extend the transitional period to seven years (extension by a maximum of 2 years following the period of 5 years from the effective date of the Agreement on the UPC).

The above regulations will not apply to Polish entities holding European patents in case Poland does not ratify the international Agreement on a Unified Patent Court.

### **The transitional period relating to the starting of the system of machine translations<sup>50</sup>**

During the transitional period, before the system of high quality machine translations into all official languages of the EU is available, a full translation of patent description into English should be attached to an application for registration of unitary effect of a patent where the language of the proceedings before the EPO is French or German; or a translation into any official language of a Member State which is an official language of the EU where the language of the proceedings is English. Those arrangements are aimed to ensure availability of all European patents with unitary effect in the English language in the transitional period, which is the language commonly used in the area of international research and technical publications. These translations should not be automatic, and their high quality should contribute to the improvement of the EPO translation tools. However, machine translations will not have binding force.

The works on machine translations system conducted by the EPO constitute a vital tool which is aimed to give access to patent information and technical knowledge. Giving access to high quality machine translations of European patent applications and descriptions into all the official EU languages in appropriate time would be beneficial for all users of the European patent system. Nonetheless, machine translations are to be informative only, without any legal effect.

The transitional period should terminate when the high quality machine translations into all the official EU languages are available, subject to regular and objective quality assessment by a committee of independent experts appointed by the participating member states of the European Patent Organization. Bearing in mind the present stage of technical development, it is estimated that high quality machine translations will be available in not more than 12 years. In these circumstances the transitional period should expire within 12 years from the date of the commencement of use of the "patent package", unless a decision on its earlier termination is made<sup>51</sup>.

### **3.1.3. Benefits for innovative businesses interested in protection of their solutions in many EU countries which result from the implementation of European patent with unitary effect**

For a businessman who has innovative solutions, who seeks protection thereof through obtainment of patent protection, who is focused on business development in at least several EU countries, the system of unitary patent protection may be a more beneficial solution than the European patent is now. This chapter compares binding patent procedures and benefits an innovative businessman could achieve through the implementation of unitary patent protection system. Implementation of the above system additionally enables a businessman to choose a solution which best corresponds to his needs. The benefits presented in this chapter refer to a limited group of businesses, i.e., those which are interested in using a patent with unitary effect. The costs of implementation of the UEP will be presented in chapter 4.3.3. Analysis of costs.

It needs to be noted that Poland is not a European leader in terms of the number of patents. In 2011 Polish entities filed 254 patent applications with the EPO, and 45 European patents were granted to Polish entities. In 2011 Polish entities filed 238 patent applications<sup>52</sup> under the international procedure. Detailed statistical data with regard to the patents will be presented in the next chapter.

<sup>50</sup> Also referred to as automatic translations.

<sup>51</sup> Art. 6 of the Proposal for Regulation on translation arrangements.

<sup>52</sup> 2012 PCT Yearly Review, The International Patent System, WIPO

If the Polish businessman is interested in obtaining protection rights for his invention concurrently in several EU states, it is possible for him to file one application with the EPO with a designation of those countries in which patent protection would be valid. After being granted a patent, he is obliged to submit translations of patent descriptions into official languages of those countries and pay relevant fees.

From the perspective of a businessman who intends to enjoy patent protection, what matters are the actions to be taken before patent offices, fees to be paid, scope of protection granted for his patent, and a possibility to pursue claims if the rights from the granted monopoly are infringed.

Below is a concise description of each of those aspects in relation to prospective benefits a businessman could obtain should unitary patent protection system be implemented.

### **Patent costs (grant and maintenance)**

Presently, i.e. in the context of the European patent system, crucial costs to be incurred when applying for a patent are fees paid to particular patent offices for filing an application, searches, examinations, publications, maintenance, etc.<sup>53</sup>. These fees may be multiplied if a businessman wishes that the patent rights be valid in several/dozen countries. A certain simplification is a possibility of filing one application with the EPO and paying a relevant fee. However, after being granted a European patent, the national requirements of validating the patent must still be met, e.g. those relating to translations, publication fees and different formal conditions for an application. If a patent holder fails to fulfill any of those requirements, a European patent is deemed to be invalid in that state. The costs additionally increase because of patent attorneys' fees. In the majority of states<sup>54</sup> it is necessary to file patent translations with national patent offices. Direct or indirect translation costs may constitute as much as 40% of all costs connected with obtaining a European patent<sup>55</sup>.

Below is a comparison of approximate costs of obtaining<sup>56</sup> and maintaining a European patent and those of a European patent with unitary effect (UEP)<sup>57</sup>. It must be noted that irrespective of the number of states where an applicant seeks protection in the case of UEP the protection is automatically granted in each state from the enhanced cooperation area and in those that have ratified the Agreement on the UPC.

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<sup>53</sup> Fees paid to the PPO are specified in the Regulation of the Council of Ministers dated 26 February 2008 amending the regulation on fees related to the protection of inventions, utility models, industrial designs, trademarks, geographical indications and topography of integrated circuits (Dz. U. [Official Journal] no. 41, item 241). Schedule of fees in the EPO are available at the EPO website <http://www.epo.org/applying/forms-fees.html>

<sup>54</sup> Cf. Agreement on the application of Article 65 EPC, Official Journal of the EPO of 2001 no. 12 (the so-called London Protocol)

<sup>55</sup> Commission Staff Working Paper - Impact Assessment, Accompanying document to the proposal for a Regulation of the European Parliament and the Council implementing enhanced cooperation in the area of the creation of unitary patent protection and proposal for a Council Regulation implementing enhanced cooperation in the area of the creation of unitary patent protection with regard to the applicable translation arrangements, the European Commission, Brussels, 15 April 2011, p.14

<sup>56</sup> The costs include fees and translation costs. The professional patent attorneys' fees or costs of other external services used by businesses while applying for a patent are not included.

<sup>57</sup> Data based on: Commission Staff Working Paper Impact Assessment Accompanying document to the Proposal for a Regulation of The European Parliament and The Council implementing enhanced cooperation in the area of the creation of unitary patent protection. The European Commission does not specify amounts of projected patent grant and maintenance fees. Because of that in the case of fees valid for UEP it has been stated that:

1. according to the valid EPO schedule of fees, those fees amount to EUR 4 950, whereas for businesses from states where the official language is not English, German or French, a 20% discount applies.
2. under Article 15.3a of the Proposal for a Regulation on the unitary patent, the amount of renewal fees shall be determined at the level which is equivalent to the level of the renewal fee paid for protection which is currently ensured by the European patents of an average geographical extent. It is assumed that this extent covers 5 states with the biggest number of validations, and therefore, in accordance with the provisions of the above-document (Assessment of Effects of the Regulations of the European Commission), we assume the amount of EUR 7500 – amount as in case of 5 countries with the biggest number of validations.

**Table 4. Comparison of approximate costs of obtaining and maintaining a European patent and those of obtaining UEP**

The number of states in which a businessman seeks protection	European patent		UEP	
	Costs of obtaining a patent <sup>58,59</sup>	Costs of maintaining a patent for 10 years	Costs of obtaining a patent <sup>60</sup>	Costs of maintaining a patent for 10 years
1 <sup>61</sup>	EUR 5 790	EUR 1 420	EUR 5 660	EUR 7 500
5 <sup>62</sup>	EUR 8 010	EUR 5 622		
10 <sup>63</sup>	EUR 15 460	EUR 10 818		
25 <sup>64</sup>	EUR 41 210	EUR 28 732		

Source: own work based on the EPO schedule of fees, data of the European Commission and estimations based on "Assessment of Effects of Regulation of the European Commission" and the work: Hoisl Karin, Harhoff Dietmar van Pottelsberghe de la Potterie Bruno, Reichl Bettina, Patent validation at the country level - the role of fees and translation costs, 25th Celebration Conference on entrepreneurship and innovation - organizations, institutions, systems and regions, Copenhagen, CBS, Denmark, 2008

Due to application of one procedure before one office (the EPO) both before and after the patent is granted, the unitary patent protection system, in terms of costs, may be considered more transparent and effective. Businessmen would not have to incur additional administrative fees, professional fees of attorneys and patent attorneys in individual states. Another advantage would be a possibility to pay maintenance fees on one date (fees for patents validated in different states must be paid on the dates and in the form required in those states).

For businessmen interested in business activity in many EU states, another advantage could be an obligation to submit translations of patents into only three EPO official languages, instead e.g. into five official languages of the countries designated for protection.

<sup>58</sup> The cost of validation on one country amounts to approximately 130 EUR. Data based on the study: Hoisl Karin, Harhoff Dietmar van Pottelsberghe de la Potterie Bruno, Reichl Bettina, Patent validation at the country level - the role of fees and translation costs, 25th Celebration Conference on entrepreneurship and innovation - organizations, institutions, systems and regions, Copenhagen, CBS, Denmark, 2008

<sup>59</sup> These costs also include the costs of translations. It was estimated that the cost of translation into 1 language is EUR 1700. Estimation based on the calculations of the European Commission indicated in Commission Staff Working Paper Impact Assessment Accompanying document to the Proposal for a Regulation Of The European Parliament And The Council implementing enhanced cooperation in the area of the creation of unitary patent protection.

<sup>60</sup> See footnote 59.

<sup>61</sup> Germany

<sup>62</sup> Germany, France, Great Britain, Austria and Ireland.

<sup>63</sup> Germany, France, Great Britain, Austria and Ireland, Luxemburg, Holland, Sweden, Belgium and Denmark.

<sup>64</sup> The EU except for Spain and Italy.

## **Territorial scope of patent protection**

At present in case of a European patent the territorial scope of protection granted under this patent depends on applicant's designation of a state where the protection will be valid. Each time a patent holder is obliged to observe national procedures and pay relevant fees, concurrently obtaining the monopoly to use his invention in those states. The benefits the patent holder may derive from the monopoly or sale of a licence are limited territorially. A solution that is additionally patented in one state may be copied and used legally in another state in which the patent is not valid.

The unitary patent protection system would guarantee a broader scope of protection. The monopoly of a businessman would extend to all the EU states (without Spain and Italy), which would enable him to draw higher profits after placing a patented solution on the market.

## **Court matters**

Patent holders may effectively enforce their rights in case of infringement thereof only in a state where the patent was granted. Where a Polish businessman holds a European patent validated in several EU countries, the same instance of infringement of the patent will be examined in separate proceedings in each state in accordance with the principles of jurisdiction described in the Regulation 2001/44. Likewise, patent revocation will be effective only in the state in which revocation proceedings were initiated. Court fees, legal fees, costs of journeys are very high and may multiply. It must also be noted that there are substantial differences in the manner of determining the scope of patent protection by individual courts or in the manner they resolve cases concerning the same patent.

A solution to the above problems would be the establishment of the Unified Patent Court which will have exclusive jurisdiction in all matters regarding patents with unitary effect. After many years of activity the court would be able to work out unified case-law in patent matters. Revocation of a patent with unitary effect would entail revocation of that patent in all the states which have signed the Agreement on the UPC.

## **State budget revenues**

Fees for granting and maintaining patents supply the state budget. The implementation of the unitary patent system in Poland may entail the increase of budget revenues. In the proposal for the Regulation on the unitary patent it is estimated that a part of the money paid to the EPO will be allocated to the activity of the Office, the remainder will be distributed among Member States and is expected to be used for the purposes related to patents: "the share of distribution should be set on the basis of fair, equitable and relevant criteria,

- a. the number of patent applications,
- b. the market size, with a guarantee of distribution of the minimum amount to each Member State
- c. compensation for the Member States for using an official language other than one of the official EPO languages or for disproportionately low level of patenting activity or for relatively recent membership in the European Patent Organization" (proposal for a Regulation on the unitary patent, Art. 16. 2).

Therefore, participation in the UPC system may entail additional State budget revenues.

It must be noted that failure to introduce the UEP in the EU (an option beyond this analysis) may result in the loss of benefits (both present in option 0 and option 1) which result from lower costs of implementing patents in the EU states or the lack of additional state revenue. Such a loss of benefits for businesses relates only to those businesses which are interested in taking advantage of the UEP system as applicants and entities that are granted patents in many EU states.

## **3.2. Present situation - statistical data**

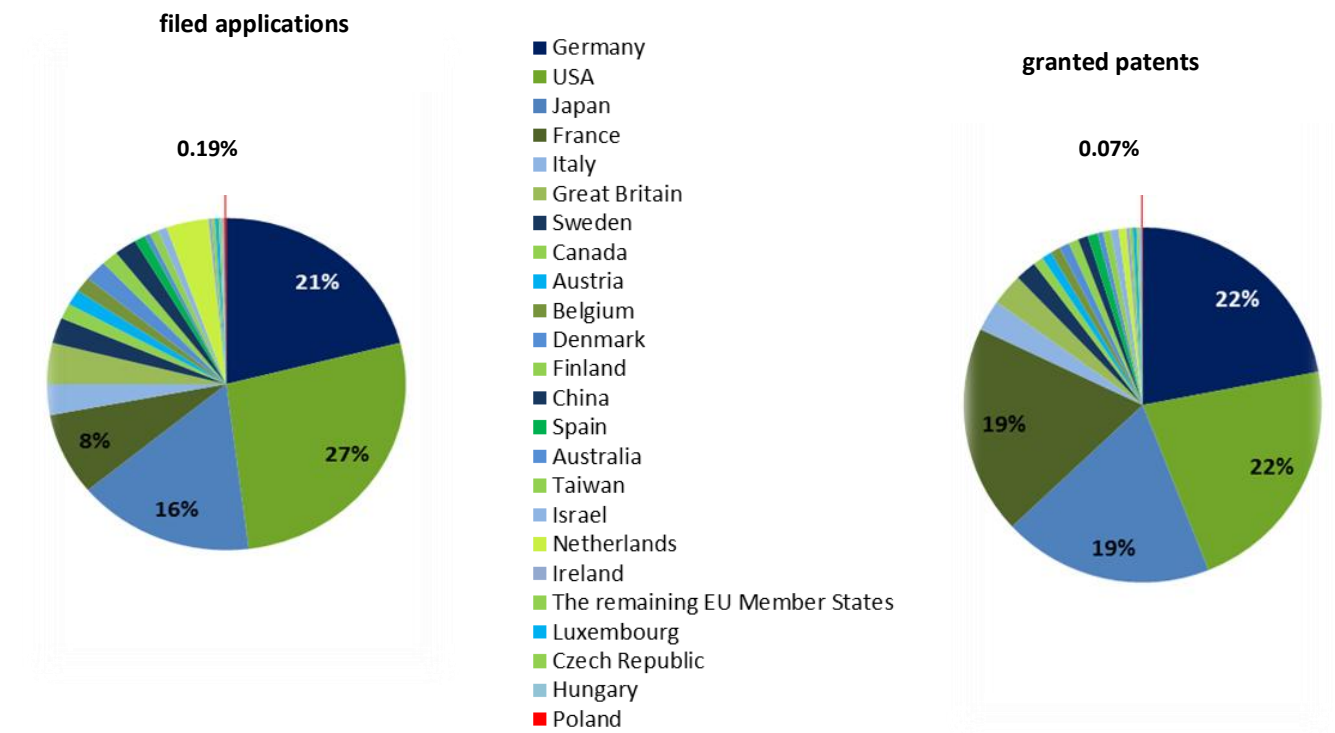
Patents granted in Poland include not only those granted by the Patent Office under the national procedure (both to national entities and to foreign applicants) but also European patents validated in Poland. Descriptions



and claims of those patents are available in Polish.

Because Poland is a member of the European Patent Organization, Polish businessmen and inventors file patents with the EPO. In 2011 entities registered in Poland filed 247 European patent applications, the number of granted patents was 45. It is a scarce number of all filed applications and patents granted by the EPO. The leaders are: Germany, the USA, Japan, France, Italy and the United Kingdom. The patents granted to applicants from those states constitute 88% of all the patents granted by the EPO in 2011. The pie chart below presents the share of the states, including Poland, in the number of patents that were applied for and granted.

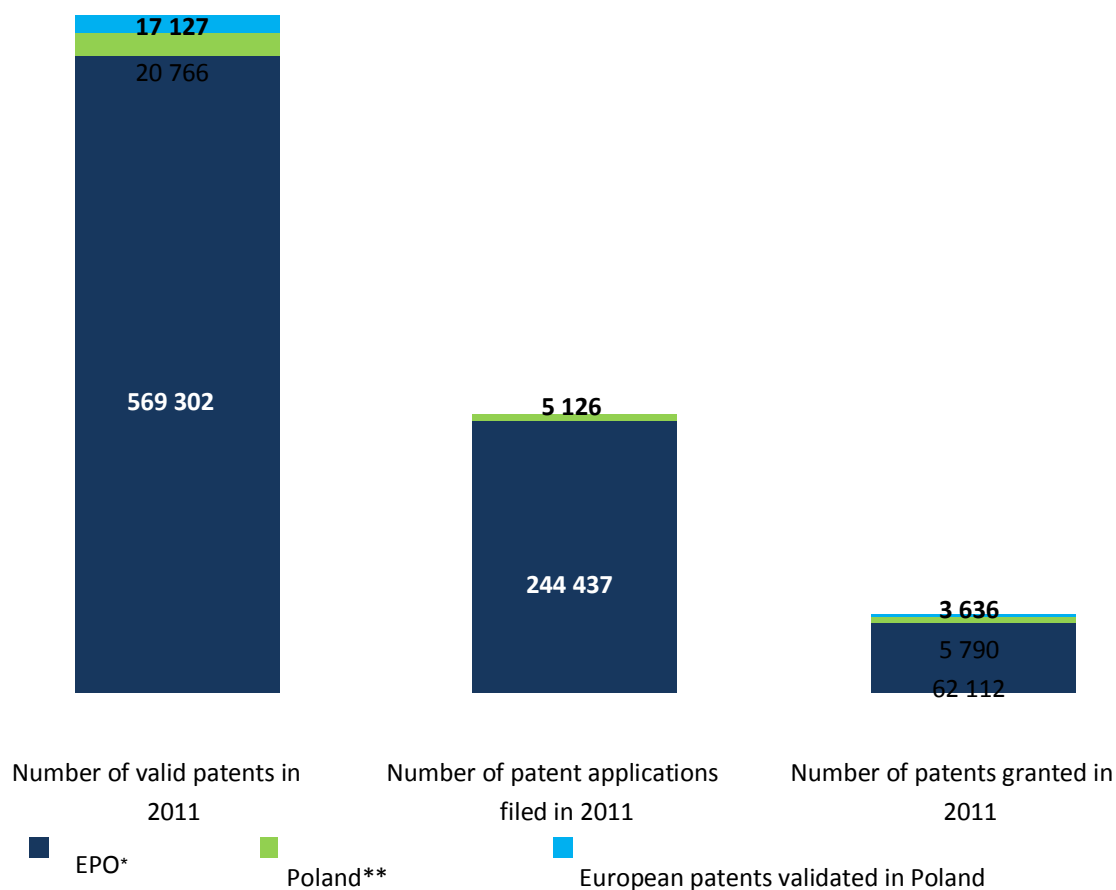
**Chart 1. Applications and patents granted by the EPO in 2011 divided into states<sup>65</sup>**



Source: EPO

<sup>65</sup> This issue is discussed in detail in further chapters.

**Chart 2. Patents valid in Poland and European patents**



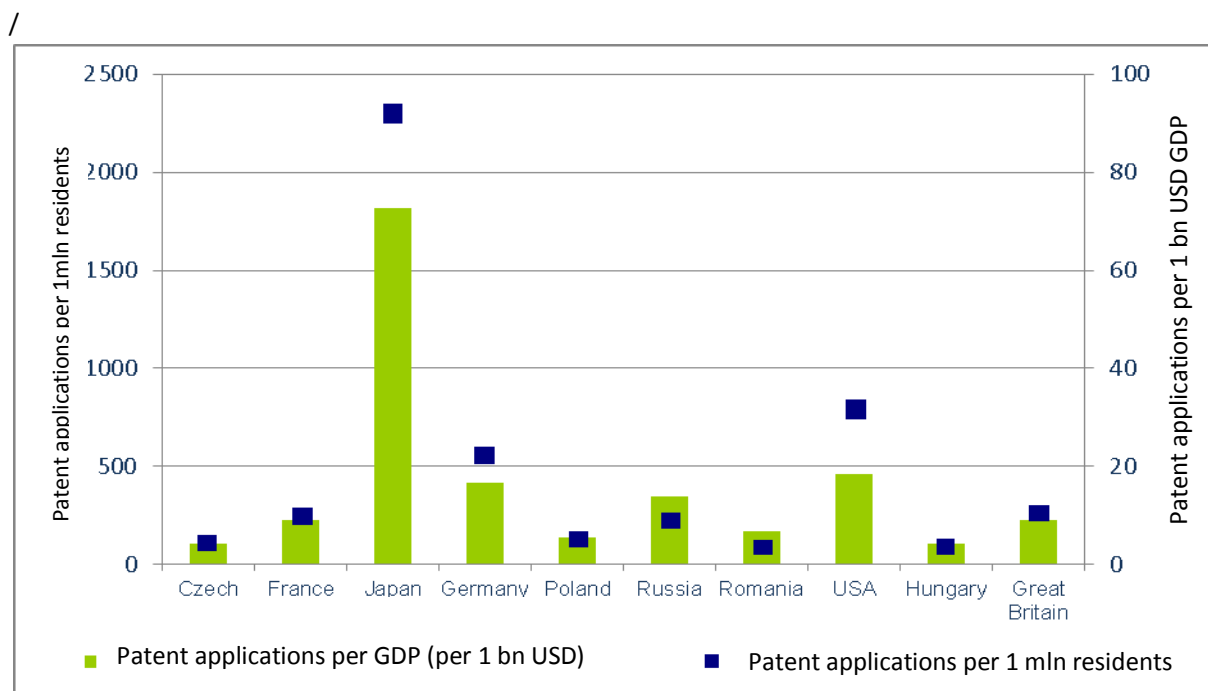
\* EPO The number of patents in the years 2002-2011 (EPO does not publish data from earlier years)

\*\*Poland The number of patents and utility designs applied for / granted / valid under national procedure

Source: PPO, EPO

The number of Polish applications and granted European patents is scarce. The comparison between the number of patents issued by the Patent Office and those issued by the EPO is similar. In 2011 approximately 38 000 patents and utility models were valid in Poland as compared to approximately 570 000 valid European patents in the same period. Only a scarce number of those patents was validated in Poland (5 790 patents were validated in Poland in 2011, 31% of which are German patents, whereas the EPO granted over 62 000 patents in the same year)

Chart 3. Patent applications and the GDP and the number of residents in selected countries in the year 2011



Source: WIPO and the World Bank (World Development Indicators)

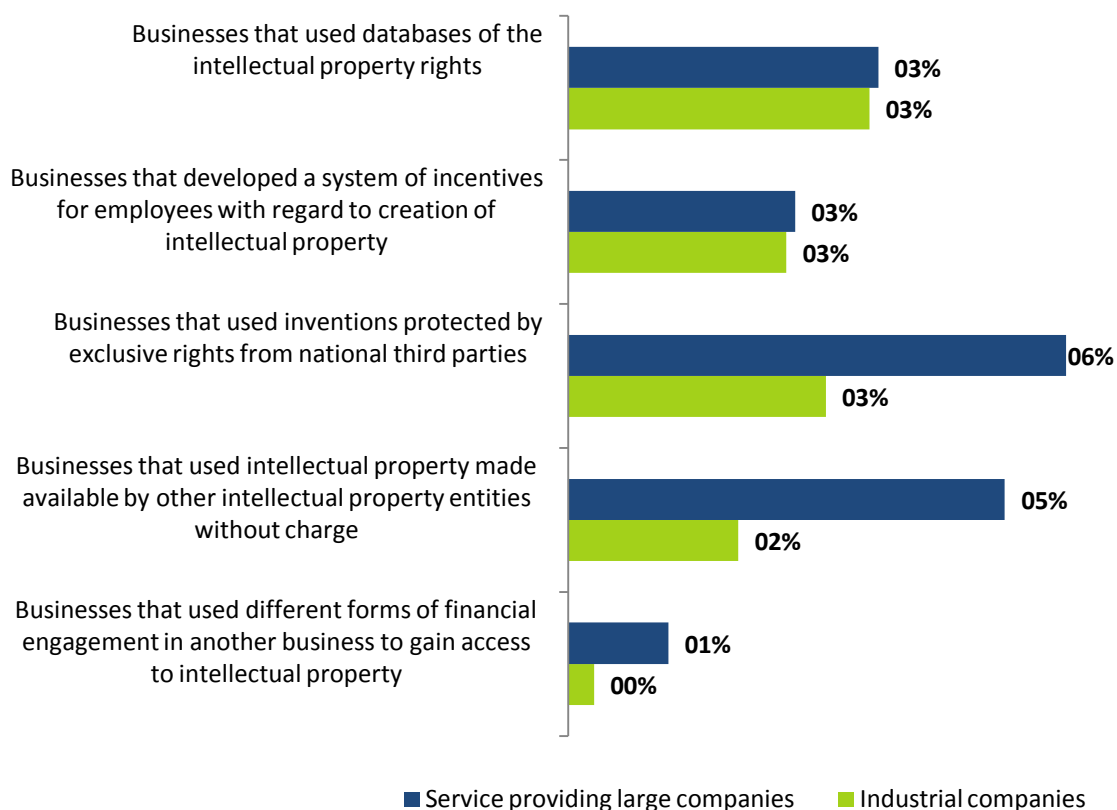
Japan reports the highest number of patent applications both in relation to GDP and to the number of residents. Other countries from among those that are leaders in the number of patents granted by the EPO - Germany and the USA - also occupy high positions. Poland's position is not so bad – 4.8 patent applications per USD 1 billion GDP, which is a better result than in the Czech Republic or Hungary. A similar situation is in the case of the number of patent applications per one million residents - the result for Poland is approximately 84 and it is higher than in Romania, the Czech Republic or Hungary. The result is far from that of “patent powers”, such as Japan, the United States or Germany. It is worth mentioning that Poland is rather a recipient of technologies from other countries than their creator<sup>66</sup>.

Interestingly, as regards the data on the use of various forms of intellectual property protection in Poland, only several percent of Polish businessmen take such an opportunity with regard to increasing innovativeness of businesses. The databases related to the protection of intellectual property rights are perused by slightly more than 3% of businessmen, whereas 5.8% of service providers and 3% of industrial companies take advantage of solutions protected by exclusive rights held by national third parties<sup>67</sup>.

<sup>66</sup>In 2010 significantly more entities acquired new technology than sold it', in: "Działalność innowacyjna przedsiębiorstw w latach 2008-2010" ["Innovative activity of businesses in the years 2008-2010"], Central Statistical Office, Statistical Office in Szczecin, Warsaw 2012, p. 93

<sup>67</sup>"Działalność innowacyjna przedsiębiorstw w latach 2008-2010" ["Innovative activity of businesses in the years 2008-2010"], Central Statistical Office, Statistical Office in Szczecin, Warsaw 2012, p. 93

**Chart 4 Use of different forms of intellectual property protection in Poland in the years 2008-2010**



Source: Innovative activity of businesses in the years 2008-2010, the Central Statistical Office in Szczecin, Warsaw 2012

**Table 5. Main entities which applied for patents in the PPO and the EPO in 2011**

	Poland*	Designs Patents	EPO	Number of Patents
1	Wrocław University of Technology	145	Siemens	837
2	Łódź Univeristy of Technology	69	Robert Bosh	790
3	Warsaw University of Technology	69	Panasonic	634
4	West Pomeranian University of Technology Szczecin	68	Samsung	536
5	AGH University of Science and Technology	59	Honda	497
6	Silesian University of Technology	40	Toyota	487
7	The Institute of Heavy Organic Synthesis „Blachownia"	38	Philips	477
8	University of Life Sciences in Poznań	36	LG Group	473
9	Institute of Non Ferrous Metals	34	Ericsson	450
10	Poznań University of Technology	31	Sony	445

\*patents and utility designs

Source: Polish Patent Office, EPO

In Poland patent applications are mainly filed by universities and research institutes. European patents, in turn, are obtained by big concerns from telecommunications, household appliances and motor industry. This, therefore, demonstrates different reasons for applying for patents. In Poland universities and research institutes obtain additional financial means<sup>68</sup> thanks to patents; it is also required sometimes to file a patent application while conducting projects co-financed by the European Union. Big concerns, in turn, file patent applications to protect results obtained from their research and development projects and to benefit from the monopoly for use of those results. Concurrently patents may constitute not only a means to protect the intellectual property rights but also a competitive tool used to prevent smaller entities from entering the market. Many companies develop their patent strategies by means of which they increase their competitive advantage<sup>69</sup>.

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<sup>68</sup> "Patent activity of an entity is usually undertaken due to the increase in its parametric assessment in the rankings of the Ministry of Science and Higher Education (...), and it is not aimed at attaining economic goals or commercialization. (...) In scientific institutions (...) patent applications, and especially foreign patents are valued because of the influence on parametric assessment and statutory financing (...) The patent policy of scientific institutions to date is mainly subject to the process of parametric assessment of an entity, not to the mechanisms of transfer and commercialization of technology." In Matusiak Krzysztof B., Guliński Jacek (ed), Rekomendacje zmian w polskim systemie transferu technologii i komercjalizacji wiedzy ["Recommendation of changes in the Polish system of technology transfer and knowledge commercialization"], Polish Agency for Enterprise Development, 2010.

<sup>69</sup> Harhoff Dietmar, Hall Bronwyn H., von Graevenitz Georg, Hoisl Karin, Wagner Stefan, Gambardella Alfonso, Giuri Paola, The strategic use of patents and its implications for enterprise and competition policies, 2007, <http://www.en.inno-tec.bwl.uni-muenchen.de/research/proj/laufendeprojekte/patents/stratpat2007.pdf>. It is an interesting overview of literature and a review of 3 most frequently used patent strategies (study based on empirical research) with an indication of the sector where these strategies are applied.

# 4. Cost/benefit analysis

## 4.1. Methodology of cost/benefit analysis

On 10 October 2006 the Council of Ministers adopted the "Guidelines for Regulatory Impact Assessment" prepared by the Ministry of Economy. This study does not evaluate Regulatory Impact Assessment (hereinafter "RIA") but uses the guidelines in the aspects regarding preparation of the Cost/Benefit Analysis (hereinafter "CBA").

Below are basic principles for preparing the CBA indicated in the Guidelines for Regulatory Impact Assessment<sup>70</sup>

- "Use advice of economists/experts when estimating the costs and benefits.
- The scope of information and analysis included in the cost/benefit estimation should correspond with the potential regulation effects but the analysis must always be objective and complete.
- The analysis guidelines should be clearly worded and tested. We must always present the source and the method of analysis and check whether other sources and research provide similar findings.
- Study the costs and benefits of a regulation in the context of the situation before the planned regulation is introduced.
- The cost/benefit analysis result should be presented in numbers. When this is impossible, provide an in-depth and unbiased qualitative evaluation."

The guidelines for the RIA are not a definite manner of proceeding because the study does not constitute a part of the RIA. However, as far as it was possible in the context of specificity of the study, taking into account the time and funds provided for it, during the preparation of the CBA the authors followed the Guidelines as indications.

In preparation of the CBA, in accordance with the Detailed Description of the Work, we adopted two potential options of proceeding with regard to the unitary patent protection system being introduced in the European Union, i.e.

- Option 0. Non-implementation of the unitary patent in Poland and non-accession to the Agreement on the Unified Patent Court.
- Option 1. Implementation of the unitary European patent in Poland and accession to the Agreement on the Unified Patent Court.

The time frames were specified on the basis of an estimated date of the proposed regulations entering into force, i.e. in principle, on 1 January 2014. These also include the estimated transitional periods, i.e. a twelve-year period for two proposals of regulations and a seven-year period for the draft Agreement on the UPC. The analysis was prepared for two time perspectives:

- 20-year perspective, i.e. transitional periods and relevant number of years, i.e. 8 years for the proposals for the regulations and a maximum of 13 years for the draft international agreement.
- 30-year perspective, i.e. transitional periods and relevant number of years, i.e. 18 years for the proposals for regulations and a maximum of 23 years for the draft international agreement.

The cost/benefit analysis requires a calculation of net benefits (i.e. benefits minus costs) for every year and then discounting them for a current period (so named the year „zero”). Then, so discounted net benefits for each year are summed up giving a result for each of the options. That result enables a comparison of the

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<sup>70</sup> "Guidelines for the Regulatory Impact Assessment", the Ministry of Economy, 2006, p.23, <http://www.mg.gov.pl/NR/ronlyres/49F92D8B-5D7B-4D1E-AB62-F9E12365DFB9/56421/Wytyczniedoocenyskutkowregulacji1>

options under analysis. The “Guidelines for RIA” do not specify a social discount rate which should be applied for discounting. However, the tools assisting in performance of relevant calculations which are available at the website of the Ministry of Economy<sup>71</sup> estimate the discount rate at the level of 7.5%. For this reason, such discount rate was applied for the analysis.

Below is a method of calculation as part of the CBA on the basis of sample figures for a 30- year period and for the two options under consideration.

**Table 6. Method of calculation on the basis of the CBA**

Option 0				
	Year 1	...	Year 30	
<b>Benefits</b>	10 000	...	2 000 000	
<b>Costs</b>	100 000	...	150 000	
<b>Net Benefits</b>	-90 000	...	1 850 000	<b>SUM</b>
<b>Net benefits discounted value</b>	-83 721		211 309	<b>1 308 795</b>

Source: own work

Option 1				
	Year 1		Year 30	
	..	...	...	<b>SUM</b>
<b>Net benefits discounted value</b>	...	...	...	<b>923 450</b>

The above example shows the method of calculation of the net benefits discounted value for individual years and the method of calculation of the discounted value of the entire regulation through summing those benefits. For the sample options under analysis the result is as follows:

- Option 0. Net benefits discounted value from implementation of the regulations in the 30 years period: PLN1 308 795.
- Option 1. Net benefits discounted value from implementation of the regulations in the 30 years period: PLN 923 450.

Based on the example above, from the perspective of social-economic benefits it is more beneficial to introduce Option 1.

The cost-benefit calculation requires that data from various sources be obtained. When preparing this analysis the following methods of data collection were used:

- Desk research.
- Electronic questionnaires.
- CATI interviews with businessmen.
- IDI interviews with businessmen, societies of businessmen, education and state institutions representatives,
- Panel of experts.

For detailed information about methods used for data collection see Annex 2.

## 4.2. Stakeholders' analysis

Below are groups of stakeholders<sup>72</sup> which are affected by the regulation related to implementing the unitary patent in Poland and ratifying the Agreement on the Unified Patent Court.

<sup>71</sup> [http://www.mg.gov.pl/files/upload/8577/Zestaw\\_narz%c4%99dzi\\_analitycznych\\_07.xls](http://www.mg.gov.pl/files/upload/8577/Zestaw_narz%c4%99dzi_analitycznych_07.xls)

<sup>72</sup> The analysis takes into account only production businesses because of a direct impact. Because of the changes concerning the implementation of an extended scope of patent protection, the solutions under analysis may also have an indirect impact on distribution and commercial businesses.

**Table 7. Stakeholders' analysis and description of a prospective impact of the proposed regulation on individual groups of stakeholders<sup>73</sup>**

Group of stakeholders	Estimated population	Description of prospective impact
Innovative businesses	5 762 - industrial SMEs 495 - industrial large companies 3 268 – service-providing SMEs 264 – service providing large companies <sup>74</sup>	<b>Positive</b> - reduction of costs of obtaining a patent in the EU <b>Negative</b> – increased number of patents in force in Poland, which increases costs of patent clearance search and limits creation of solutions which do not infringe those patents, which may decrease willingness to invest in innovations
Exporting businesses	13 798 – SMEs 1 921 – large companies <sup>75</sup>	<b>Positive</b> - accessing new markets becomes cheaper (because of reduction of costs of obtaining a patent in the EU) <b>Negative</b> - for businesses that enter new markets where there have been no competitors' patented solutions by now. In case of competitor being granted a European patent with unitary effect for some solution- reduction of prospective sales markets
Businesses from market sectors where many patent applications are filed, where entities are conscious and apply patent strategies (e.g. pharmacy)	4 611 <sup>76</sup>	<b>Negative</b> - vast number of patent applications filed by competitors from outside Poland which will not have to validate those solutions in Poland, but will automatically hold a patent with unitary effect, which for Polish businesses may cause e.g. a necessity to resign from certain segments of the market or a necessity to purchase a licence from foreign companies, and a necessity to monitor and conduct patent clearance searches of a bigger number of patents.
Patent attorneys	981 <sup>77</sup>	<b>Rather negative</b> - decrease of demand for patent attorneys' services engaged in validations of European patents; possibility of providing services in the EU market which requires appropriate knowledge of foreign languages; increased competition on the part of patent attorneys from other countries.
Patent Office	530 persons, which includes 196 experts <sup>78</sup>	<b>Change of the scope of activity of the Patent Office</b> - e.g. decreased number of national patent applications and validations, more activities related to the provision of information about European patent with unitary effect

<sup>73</sup> Based on information gathered during desk research analysis, interviews, panel of experts and from electronic questionnaires. Details in Annex 2.

<sup>74</sup> Own calculation based on data: Przedsiębiorstwa aktywne innowacyjnie w latach 2008-2010 w % ogółu przedsiębiorstw według liczby pracujących. (Działalność innowacyjna przedsiębiorstw w latach 2008-2010, Główny Urząd Statystyczny, Urząd Statystyczny w Szczecinie) oraz rejestru REGON dostępnego w GUS. [Companies innovatively active in the years 2008-2010 in % of all companies according to the number of working population (Innovative activity of businesses in the years 2008-2010, Central Statistical Office, Statistical Office in Szczecin)] and the REGON register available in CSO.

<sup>75</sup> Report on the status of the sector of small or medium-sized enterprises in Poland, PARP, Warsaw 2011

<sup>76</sup> Section C, chapters: 20, 21, 26 27, 28 and 28 of the Polish Classification of Activities

<sup>77</sup> Polish Chamber of Patent Attorneys

<sup>78</sup> Data obtained from the PPO



Group of stakeholders	Estimated population	Description of prospective impact
Production businesses	40 289 <sup>79</sup>	<b>Rather negative</b> - increased number of patents that are valid in Poland, which necessitates patent clearance searches which business have not done by now. This may also result in more frequent patent infringements and - consequently - an increased number of court disputes.
R&D entities	1 157 <sup>80</sup>	<b>Rather positive</b> - cheaper application for a patent effective in 25 EU states, increased commercialization of solutions – bigger “sales” market - (extended to 25 EU states) developed by R&D entities
Judicature	-	<b>Positive</b> - unified case-law of the UPC <b>Negative</b> - costs of creating a local division of First instance of the UPC in Poland

#### 4.2.1. Opportunities, threats, advantages and disadvantages for SMEs stemming from the unitary patent protection system

Approximately 1.67 million businesses<sup>81</sup> operate in Poland. From this population the micro, small and medium-sized enterprises constitute 99.8%, whereby as much as 96% are the companies which employ up to 6 persons. Small and medium-sized enterprises (SMEs) generate almost one half of the Polish GDP, while all businesses which operate in Poland generate 72.3% GDP<sup>82</sup>. For the above reasons SMEs constitute a group which is particularly important while assessing the impact of the regulations. The same is indicated the Guidelines for the Regulatory Impact Assessment which point out that “Most regulations have stronger impact on SMEs than on large corporations, even if they seem to give them equal treatment. This is because SME are not so good in adjusting to change (fewer human and financial resources)”<sup>83</sup>.

Below are advantages, disadvantages, opportunities and threats for SMEs which result from the unitary patent protection system. The advantages and disadvantages which result from the unitary patent protection system relate to the characteristics of this system, whereas opportunities and dangers present challenges (with a positive or negative prospective effect) to SMEs connected with the implementation of the unitary patent protection system in Poland.

<sup>79</sup> Sections C, D and E of Polish Classification of Activities

<sup>80</sup> Research and Development sector in Poland, Polish Agency of Information and Foreign Investment S.A., Warsaw 2010

<sup>81</sup> “Działalność przedsiębiorstw niefinansowych w 2009” [“Activity of non-financial companies in 2009”], Central Statistical Office

<sup>82</sup> Report on the status of small and medium-sized enterprises, Polish Agency for Enterprise Development, 2011

<sup>83</sup> Guidelines for the Regulatory Impact Assessment, Ministry of Economy, 2006, p. 25

**Table 8. Opportunities, threats, advantages and disadvantages for SMEs resulting from the unitary patent protection system**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Possibility of obtaining a patent which will be valid in 25 states after filing one patent application</li> <li>• Economizing on costs and time (simpler patent management) while filing an application and maintaining a patent in 25 EU states<sup>84</sup></li> <li>• In the case of a patent application with unitary effect there is a possibility for SMEs to request the refund of translation costs<sup>85</sup></li> <li>• Wider choice as to the possibility of filing for a patent (national patent, European patent, European patent with unitary effect)</li> <li>• In case of a dispute related to a claim for damages where an alleged infringer is SME, taking into consideration that the alleged infringer could have acted without knowledge or without justified reasons to know that it infringes UEP</li> <li>• unified interpretation of the case-law with regard to European patent and the UEP in 25 EU states <ul style="list-style-type: none"> <li>• Wider scope of protection<sup>86</sup></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Stronger competition as a result of an increased number of patents which are valid in Poland</li> <li>• Publication of the UEP (description and patent claims) in English, German or French (only those version will become binding)</li> <li>• Parallel applicability of three patent systems: national, European and UEP<sup>87</sup></li> <li>• UEP legal system will become more complex - multitude of transitional periods and solutions, which have not been introduced before <ul style="list-style-type: none"> <li>• Wider scope of protection<sup>88</sup></li> </ul> </li> <li>• Uncertainty as to whether a local division of First instance of the UPC will be established in Poland</li> </ul>

<sup>84</sup> Economizing on costs is possible in case of businesses currently interested in the filing of a patent application which would be validated in at least several countries. However, if a businessman is interested in validating a patent in 1-3 countries only, the current solution (European patent) is more beneficial in terms of costs.

<sup>85</sup> The amount of costs to be refunded is not known.

<sup>86</sup> Compared to the present system, the protection has been extended with regard to:

- storage of a product for the purposes of manufacturing, offering, marketing or using, and importing,
- storage of a product for the purposes of offering, marketing or using, or importing of the product obtained directly after applying a manufacture process which is the subject of a patent,
- so called indirect infringement.

<sup>87</sup> On the one hand, this solution gives a greater choice to an entrepreneur, on the other – multiplicity of systems impedes the functioning of “passive” recipients of those systems – of businesses which are not interested in patenting and their actions may concurrently result in patent infringements (e.g. unconsciously)

<sup>88</sup> On the one hand a wider scope of protection as compared to the current solutions is an advantage of the system from the perspective of entities which apply for patents, on the other - it is a disadvantage of the system from the perspective of patent recipients because it entails an increased number of potential patent infringements.

Opportunities	Threats
<ul style="list-style-type: none"> <li>• Possibility of increasing innovativeness of businesses</li> <li>• Possibility of increasing revenues of businesses which is related to holding the UEP by means of e.g. sale of licences, increased goodwill, improvement of business image</li> <li>• Possibility of revocation of patents held by other entities in 25 countries by virtue of a single decision</li> <li>• Access to funds which support preparation and filing of the UEP application<sup>89</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Businesses which file for patents incur costs related to translations of patent description and patent claims</li> <li>• Because of the lack of a binding Polish version of a patent there is a greater likelihood of incorrect translation, which might result in e.g. unconscious patent infringement</li> <li>• Increased costs related to patent clearance searches due to a greater number of patents in force</li> <li>• Increased probability of patent infringement due to a greater number of patents in force, which may lead to a court dispute or resignation of a business from a part of its activity</li> <li>• Greater likelihood of situations necessitating licence purchase to avoid patent infringement because of a greater number of patents in force</li> <li>• Higher costs related to an extended scope of patent protection and unconscious infringements by businessmen, which may result in e.g. court disputes</li> <li>• Because of higher costs of functioning of businesses (described above), the danger related to a drop in profitability of businesses and, as a consequence, closing down businesses</li> <li>• creation of innovative solutions becomes less interesting<sup>90</sup></li> <li>• Difficulties in comprehending the idea behind the UEP, how it differs from the European patent, which may lead businessmen to taking actions which generate costs (e.g. a businessman does not know to which court he should revert if his rights have been infringed, which forces him to spend time for consultations, or even leads him to wrong decisions)</li> </ul>

### 4.3. Analysis of impact

#### 4.3.1. Description of options subject to analysis

#### Option 0. Non-implementation of unitary patent in Poland and non-acceding to the Agreement on the Unified Patent Court

<sup>89</sup> Currently these funds are available in action 5.4.1. of the Innovative Economy Operational Program, but availability of these funds is also expected in a further programming period.

<sup>90</sup> On the one hand, implementation of the UEP may result in the increased innovativeness, though as it has been further demonstrated, this effect is rather theoretical due to the fact that Polish entities will be able to take advantage of beneficial aspects of the functioning of the UEP even if the unitary patent is not implemented in Poland. On the other hand, due to increased number of patents in force on the territory of Poland, it will be more difficult to create an innovative solution which will not infringe any patents (including in case where the inventor of a solution is not aware of the existence of such patents), which may discourage businesses from investing in the creation of innovative solutions. Therefore, it is not possible to state univocally if the UEP will have a positive or a negative effect on innovativeness of SMEs.

According to this option Poland does not implement the unitary patent and does not ratify the Agreement on the Unified Patent Court. It is assumed that the unitary European patent system will be established and will include 24 EU Member States (without Poland, Spain and Italy). In such a situation Polish businesses will still be able to take advantage of national protection, European patent and its validation, and a solution in the form of a unitary European patent.

In accordance with this option, because the UEP system does not include Poland, foreign businesses which would like to have their solutions patented in Poland have to use the European patent system and subsequently validate a European patent in Poland. Because of the above, the number of validations will certainly be higher than in the case of implementation of a unitary patent. Concurrently, the UEP will not become "automatically" valid in Poland.

If Poland does not ratify the Agreement on the Unified Patent Court, a local division will not be created in Poland; therefore when a transitional period elapses, court disputes related to European patent infringement in Poland will be resolved by national courts. Poland will not have to incur the costs of creating the UPC.

#### **Option 1. Implementation of unitary patent in Poland and ratification of the Agreement on the Unified Patent Court.**

This option provides that Poland implements unitary patent and ratifies the Agreement on the Unified Patent Court. It is assumed that the unitary European patent system will be valid in 25 EU Member States (without Spain and Italy). Polish businesses will still be able to take advantage of national protection, a European patent and validations thereof, and a solution in the form of unitary European patent. Concurrently, the state budget will receive additional funds from the fees paid to the EPO, a part of which is distributed among states participating in the unitary European patent system.

Under this option, because of the fact that the UEP system includes Poland, there will be a significant reduction in the number of European patents validated in Poland because the majority of businessmen will apply for a European patent with unitary effect, and not for a European patent. Patents with unitary effect will "automatically" become valid in Poland.

It is assumed that if Poland should ratify the Agreement on the Unified Patent Court, a local division will be created in Poland<sup>91</sup>. Because of that court disputes related to patent infringement (both European and UEP) in Poland will be resolved in Poland. Concurrently, Poland will have to bear the costs of creating this court.

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<sup>91</sup> According to the information provided by the Ministry of Economy, in the analysis it was assumed that a local division of First instance of UPC would be established in Poland.

## Differences between options

Below are basic differences between the options under consideration

**Table 9. Differences between Option 0 (non-implementation of the regulations) and Option 1 (implementation of the regulations)**

	Option 0	Option 1
<b>Implementation of unitary patent and ratification of the Agreement on a Unified Patent Court</b>	NO	YES
<b>Creation of Unitary European Patent</b>	YES	YES
<b>Territorial scope of UEP</b>	EU without Poland, Spain and Italy	EU without Spain and Italy
<b>Possibility of taking advantage of UEP by RDEs and Polish entities</b>	YES <sup>92</sup>	YES
<b>Patents valid in Poland</b>	National patents Validated European patents	National patents Validated European patents European patents with unitary effect
<b>Court cases for infringements of European Patents and UEPs which took place in Poland</b>	National courts (1 <sup>st</sup> and 2 <sup>nd</sup> instance)	UPC: Local, regional or central division (1 <sup>st</sup> instance) Court in Luxembourg (2 <sup>nd</sup> instance) Central division (for actions for revocation not related to actions for infringement)
<b>Court cases for infringements of European Patents and UEPs by Polish companies based outside Poland</b>	UPC: Local, regional or central division (1 <sup>st</sup> instance) Court in Luxembourg (2 <sup>nd</sup> instance) Central division (for actions for revocation not related to actions for infringements) National courts in Italy and Spain	UPC Local, regional or central division (1 <sup>st</sup> instance) Court in Luxembourg (2 <sup>nd</sup> instance) Central division (for actions for revocation not related to actions for infringements) National courts in Italy and Spain

<sup>92</sup> Because of the fact that Polish businessmen will be able to take advantage of UEP also if Poland does not accede to enhanced cooperation and does not ratify the Agreement on the UPC, there is an insignificant difference between the options under comparison with regard to the benefits which result from implementation thereof.

### 4.3.2. Analysis of benefits

Below is a comparison of benefits for both options under analysis.

**Table 10. Comparison of benefits between Option 0 and Option 1.**

	Option 0	Option 1
<b>State budget revenues</b>	<p>State budget revenues include amounts obtained from:</p> <ul style="list-style-type: none"> <li>• The activity of the Patent Office related to granting and maintaining patents filed under national procedure</li> <li>• The activity of the Patent Office related to granting and maintaining European patents validated in Poland</li> </ul>	<p>State budget revenues include amounts obtained from:</p> <p>The activity of the Patent Office related to granting and maintaining patents under national procedure</p> <ul style="list-style-type: none"> <li>• The activity of the patent office related to granting and maintaining European patents validated in Poland</li> <li>• EPO's activity with regard to granting and maintaining UEPs<sup>93</sup></li> </ul> <p><b>State budget revenues will be higher in Option 1.</b> In accordance with the assumptions, the revenues in case of Option 1 will be approximately 80% higher than in case of Option 0.<sup>94</sup></p>
<b>Monopoly for use of a patented product / solution</b>	<p>A business which holds a patent also has a monopoly for use of a patented product or a solution. Some businesses take advantage of this monopoly, others sell their rights as licences; some patent holder do not take advantage of their patents at all.</p> <p>Because Polish businesses - irrespective of whether we will accede to the unitary patent system or not - will be able to apply for UEP, it is assumed that the number of UEPs and the number of European patents, and national patents held by Polish businessmen will be the same in case of Option 0 and Option 1.</p> <p><b>For the above reasons, the revenues of businesses related to the monopoly for use of a patented product / solution will be the same in case of Option 0 and Option 1.</b></p>	

<sup>93</sup> Part of the money paid to the EPO will be allocated to the activity of the Office, the remainder will be distributed among Member States and it is expected to be used for the purposes related to patents: "the share of distribution should be set on the basis of fair, equitable and relevant criteria,

a. the number of patent applications,  
b. the market size, with a guarantee of distribution of the minimum amount to each Member State  
c. compensation for the Member States for using an official language other than one of the official EPO languages or for disproportionately low level of patenting activity or for relatively recent membership in the European Patent Organization" (proposal for a Regulation on the unitary patent, Art. 16. 2).

<sup>94</sup> Main methodological assumptions and the results of calculation of costs and benefits are described in chapter 4.5. Calculation of costs and benefits - comparison of options.

	Option 0	Option 1
Revenues from licences or sale of inventions	<p>A business which owns a patent may sell its rights under a licence.</p> <p>Because Polish businessmen - regardless of whether we will accede to the unitary patent system or not - will be able to apply for UEP, it is assumed that the number of UEPs and the number of European and national patents held by Polish businessmen will be the same both in case of Option 0 and Option 1.</p> <p>For the above reasons, revenues of <b>businesses related to sale of licences or an invention will be the same in case of both these options.</b></p>	
Advantage for the image	<p>A business which owns a patent may increase its goodwill by means of a mere fact of holding a patent - it may appraise a patent, use it as an extra asset during negotiations, either in business or when applying for a loan.</p> <p>Owning a patent can increase the value of the business in the eyes of prospective clients of investors.</p> <p>Because Polish businessmen - regardless of whether we will accede to the unitary patent system or not - will be able to apply for UEP, it is assumed that the number of UEPs and the number of European and national patents held by Polish businessmen will be the same both in case of Option 0 and Option 1.</p> <p><b>For the above reasons, the advantage for the image related to patent ownership will be the same in both options.</b></p>	
Opening of new sales markets	<p>The fact of UEP entering into force, which will entail a drop in costs related to obtaining a “bunch” of patents, may contribute to the increased interests in entering new markets on the part of Polish businessmen. Because UEP will be binding in all states which will ratify the Agreement on the UPC, it may be an incentive for businessmen to offer their patented solutions or products on new markets. Nonetheless, as it results from the interviews with businessmen, the fact of holding a patent insignificantly affects a decision on entering new markets. Businessmen rather calculate their potential taking into account, among others, information concerning competition in a specific market, costs to be incurred (e.g. related to promotional activity), sales options available on a given market, etc.</p> <p>Because Polish businessmen - regardless of whether we will accede to the unitary patent system or not - will be able to file an application for UEP, it is assumed that the number of UEPs and the number of European and national patents owned by Polish businessmen will be the same both in case of Option 0 and Option 1.</p> <p>For these reasons, <b>a benefit related to the opening of new sales markets will be the same in both options.</b></p>	
Opportunity for research and development entities to commercialize solutions	<p>The fact of UEP entering into force, which will entail a drop in costs related to obtaining a “bunch” of patents, may contribute to the RDEs’ increased interest in patenting solutions not only in Poland but also in the EU 25. In case of taking advantage of UEP, a group of businesses which peruse patent databases grows, therefore, there is a greater possibility of RDEs selling or commercializing patented solutions. This may be an incentive for RDEs to apply for patents for those solutions which are indeed likely to be implemented.</p> <p>Because Polish research and development entities - regardless of whether we will accede to the unitary patent system or not - will be able to apply for UEP, it is assumed that the number of UEPs and the number of European and national patents</p>	

	<div>Option 0</div> <div>Option 1</div>
	<p>owned by RDEs will be the same both in case of Option 0 and Option 1.</p> <p>For the above reasons <b>a benefit related to an opportunity for research and development entities to commercialize solutions will be the same in case of both options.</b></p>
<b>Possibility of revoking a patent in each EU state</b>	<p>The UEP will be binding in all states which will ratify the Agreement on the UPC. Revoking a patent with unitary effect will entail revocation on the territory of all those states. Thus, Polish businessmen will be able to take actions aimed to revoke competitors' patents by which the monopoly granted before will not be effective anymore. In case of revocation of a competitor's patent, a businessman does not have to purchase a licence and has an opportunity to enter those markets which were not accessible before because of preventing patent infringement.</p> <p>Because Polish businessmen - regardless of whether we will accede to the unitary patent system or not - will be able to apply for revocation of patents on the territory of all states which are parties to the Agreement on the UPC, the benefits derived from this possibility will be the same both in case of Option 0 and Option 1.</p> <p>For the above reasons, <b>a benefit related to a possibility of revoking patents in all EU states will be the same in both options.</b></p>
<b>Unification of law and interpretation thereof</b>	<p>A Polish businessman who holds UEP, in case it is infringed, will be able to enforce his rights before the UPC. Irrespective of the state of EU 25 where this situation has taken place, a businessman is assured that the law will be construed in one way because one court (which is not a national court) will decide the case. Therefore, a businessman will have no reason to fear that a court in one state may decide differently than a court in another state.</p> <p>Because Polish businessmen - regardless of whether we will accede to the unitary patent system or not - will be able to draw benefits from unification of law and interpretation thereof<sup>95</sup>, benefits derived from this possibility will be the same both in case of Option 0 and Option 1.</p> <p>For the above reasons, <b>a benefit related to unification of law and interpretation thereof will be the same in both options.</b></p>

<sup>95</sup> The difference is that in case of Option 0 (non-implementation of the regulation) this interpretation will apply to 24 EU states (without Poland, Italy and Spain), in case of Option 1, in turn, this interpretation will apply to Poland. Moreover, as regards UEP "the court may order cessation of actions deemed to be infringing or allow that they be continued on condition of payment of a deposit [by the claimant]. The court may also secure claims through seizure of goods. In case financial standing of a claimant indicates that most likely he is unable to cover the damage, the court may seize his moveable/ immovable property or block his bank account as a measure of security." (Szczepanowska-Kozłowska Krystyna, „Korzyści, szanse i zagrożenia wynikające z jednolitego systemu ochrony patentowej dla jednostek naukowych”, [“Benefits, opportunities, and threats resulting from the unitary patent protection system for scientific entities”], the Ministry of Science and Higher Education, 2012. p. 19-20). Therefore, on the one hand, the UPC may apply far-reaching measures of security, on the other, it may demand payment of a deposit from the claimant, which may decrease potential application of this provision for blocking competitors' actions.



### 4.3.3. Analysis of costs

Below is a comparison of costs for both options under analysis.

**Table 11. Comparison of costs in case of Option 0 and Option 1**

	Option 0	Option 1
<b>Costs of obtaining a patent</b>	<p>The costs of obtaining a patent include:</p> <ul style="list-style-type: none"> <li>Costs of filing a patent application with the PPO,</li> <li>Costs of filing a patent application (for a European patent and UEP) with the EPO.</li> </ul> <p>Costs of filing a patent application with the EPO or the PPO will be the same, regardless of whether we accede to the UEP system (Option 1) or not (Option 0). The only difference is that in case of Option 1 a businessman who wishes to obtain patent protection in EU 25 (without Spain and Italy) will file a patent application only with the EPO and pay relevant fees, whereas in case of Option 0 he will have to file an application with the EPO by which he will be granted protection in 24 EU states (without Poland, Spain and Italy) and an application with the PPO (to be granted protection in Poland). Nevertheless, fees for a patent application in the Polish Patent Office are very low and represent approximately 5% of an anticipated fee paid to the EPO<sup>96</sup>.</p> <p>Because the difference between the costs is small (also in view of the number of granted patents), it has been acknowledged that <b>the costs of obtaining patents in case of both options will be the same.</b></p>	
<b>Costs of patent maintenance</b>	<p>The costs of patent maintenance include:</p> <ul style="list-style-type: none"> <li>Costs of maintenance of patents granted by the PPO,</li> <li>Costs of maintenance of patents (European patents and UEPs) granted by the EPO.</li> </ul> <p>Costs of maintenance of patents granted by the EPO or the PPO will be the same, regardless of whether we will accede to the UEP system (Option 1) or not (Option 0). The only difference is that in the case of Option 1 a businessman who will obtain patent protection in EU 25 (without Spain and Italy) under the UEP, will pay only one patent maintenance fee, whereas in case of Option 0 - if he wishes to maintain his patent in those EU 25, he will have to pay for the UEP which guarantees protection in 24 EU states (without Poland, Spain and Italy) and for a national patent under which the patent will be valid in Poland. Nevertheless, the fees for maintenance of a patent in the Polish Patent Office are low - approximately 11% of the anticipated fee paid to the EPO<sup>97</sup>.</p> <p>Because the difference in the costs is small (also in view of the number of maintained patents), it has been acknowledged that <b>the costs of maintaining patents in case of both options will be the same.</b></p>	

<sup>96</sup> The calculation was made on the basis of the current schedules of fees and an anticipated fee for a UEP application – based on the Regulation Impact Assessment of the European Commission (A supplement to a petition related to Regulation of the European Parliament and the Council implementing enhanced cooperation in the area of the creation of unitary patent protection and Council Regulation implementing enhanced cooperation in the area of the creation of unitary patent protection system with regard to the applicable translation arrangements).

<sup>97</sup> See footnote above.

	Option 0	Option 1
<b>Costs of court proceedings</b>	<p>The costs of court proceedings cover only those costs which are incurred by businesses which act as defendants. These costs do not take into account the costs borne by businesses which initiate proceedings since the number of court actions for patent infringement brought by Polish businessmen against their competitors does not depend on the choice of any option. This results from the fact that Polish businesses will be able to take advantage of protection under the UEP and the UPC in case of infringements outside Poland irrespective of whether Poland will become a party to the Agreement on the UPC or not.</p> <p>The costs of court proceedings include the cost of:</p> <ul style="list-style-type: none"> <li>• Court fees</li> <li>• Professional lawyers' fees</li> <li>• Legal representation</li> <li>• Time spent attending court hearings</li> <li>• Damages</li> <li>• Losses related to provisional measures of protection applied<sup>98</sup></li> </ul> <p>The costs of proceedings outside Poland in which Polish businessmen act as defendants will be the same irrespective of any of the options. This results from the fact that the UEP will be binding in Germany, France or the Netherlands irrespective of whether Poland will become a party to the Agreement on the UPC or not.</p> <p>The difference between the options will be only in the case of infringements which take place in Poland. In case of Option 0 the number of the court proceedings in Poland will depend on the number of patents binding in Poland, i.e. national</p>	<p>The costs of court proceedings cover only those costs which are incurred by businesses which act as defendants. These costs do not take into account the costs borne by businesses which initiate proceedings since the number of court actions for patent infringement brought by Polish businessmen against their competitors does not depend on the choice of any option. This results from the fact that Polish businesses will be able to enjoy protection under the UEP and the UPC in case of infringements outside Poland irrespective of whether Poland becomes a party to the Agreement on the UPC or not.</p> <p>The costs of court proceedings include the cost of:</p> <ul style="list-style-type: none"> <li>• Court fees</li> <li>• Professional lawyers' fees</li> <li>• Legal representation</li> <li>• Time spent attending court hearings</li> <li>• Translation of documentation</li> <li>• Potential travels abroad in case of proceedings which take place outside Poland</li> <li>• Damages</li> <li>• Losses related to provisional measures of protection applied<sup>99</sup></li> </ul> <p>The costs of proceedings outside Poland in which Polish businessmen act as defendants will be the same irrespective of any of the options. This results from the fact that the UEP will be binding in Germany, France or the Netherlands irrespective of whether Poland will become a party to the Agreement on the UPC or not.</p>

<sup>98</sup> If provisional measures of protection are applied, a bank account of a business against which an action has been taken may be blocked and production or sales of products withheld where the solutions applied may infringe claimant's rights of protection. Such actions may indeed result in decreased defendant's business revenue.

<sup>99</sup> See footnote above

Option 0		Option 1
	<p>patents and those validated in Poland (the number of which is lower than the UEPs in case of Option 1). It must also be considered that opposition proceedings will be held before national courts (both for 1<sup>st</sup> and 2<sup>nd</sup> instance) and translation of documentation will not be required, because the Polish language version is binding for patents validated in Poland.</p>	<p>The difference between options will be only in the case of infringements which take place in Poland. In case of Option 1 the number of the court proceedings in Poland will depend on the number of patents binding in Poland, i.e. national patents, those validated in Poland and UEPs (in total the number of those patents is higher than in case of Option 0). It must also be considered that opposition proceedings will be held before the UPC. Even if the UPC of I instance<sup>100</sup> is created in Poland, hearings before the 2<sup>nd</sup> instance court will be outside Poland. Despite the fact that the language of the proceeding in the 2<sup>nd</sup> instance may be the language of the 1<sup>st</sup> instance proceedings, one must take into account that a hearing in the 2<sup>nd</sup> instance court will entail travels abroad and costs related thereto.</p>
	<p>The number of court proceedings will be higher in case of Option 1. Likewise, an average cost of court proceedings will be higher in case of Option 1. Therefore, <b>the costs of court proceedings will be higher</b> in case of Option 1. In accordance with the assumptions, the costs in case of Option 1 will be approximately 5 times higher than in case of Option 0<sup>101</sup>.</p>	
<b>Costs of licence purchase<sup>102</sup></b>	<p>The higher the number of patents valid in a specific market, the higher the likelihood that a business may infringe a patent of another business, be it intentionally or not. Businessmen, to be on the safe side, purchase a licence from businesses which own patents. It is a rule that the higher the number of valid patents in the market, the higher the number of licences purchased by businesses. Because the number of patents in case of Option 0 covers</p>	<p>The higher the number of patents valid in a specific market, the higher the likelihood that a business may infringe a patent of another business, be it intentionally or not. Businessmen, to be on the safe side, purchase a licence from businesses which own patents. It is a rule that the higher the number of valid patents in the market, the higher the number of licences purchased by businesses. Because the number of</p>

<sup>100</sup> On the basis of information provided by the Ministry of Economy it was assumed that a local division of the UPC of First Instance will be created in Poland.

<sup>101</sup> Main methodological assumptions and results of the calculation of costs and benefits are described in chapter 4.5. Calculation of costs and benefits –comparison of options.

<sup>102</sup> For calculation purposes, the purchase of a licence is equivalent to other possible options related to patent infringement claims. e.g., closing down a business against which such claims are raised or performing additional activities enabling effective avoidance of claims related to patent infringement.

Option 0		Option 1	
	national patents and those validated in Poland (without the UEP), it is smaller than the number of patents in case of Option 1.	patents in case of Option 1 covers national patents, those validated in Poland and UEP, it is greater than the number of patents in case of Option 0.	
	The costs of purchase of a single licence will be the same irrespective of an Option, whereas the number of purchased licences will be higher in case of Option 1. Therefore, <b>the costs of purchasing a licence will be higher in the case of Option 1</b> . In accordance with the assumptions, the costs in case of Option 1 will be approximately 90 - 180% higher (depending on the sensitivity analysis defined by scenarios) than in case of Option 0 <sup>103</sup> .		
Costs of patent clearance searches	A businessman, in order to ensure that he does not infringe a valid patent, should peruse patent databases. In case of Option 0 in Poland national patents and European patents validated in the Polish Patent Office will be in force. Descriptions and claims of those patents are published by the PPO in the Polish language.  Concurrently, the number of valid patents is smaller than in the case of Option 1.	A businessman, in order to ensure that he does not infringe a valid patent, should peruse patent databases. In case of Option 1 in Poland national patents, European patents validated in the Polish Patent Office and the UEPs will be in force. Descriptions and claims of national patents and those validated are published by the PPO in the Polish language, whereas a description of UEP will be published by the EPO in English, German or French.  During the transitional period (12 years) a description will be each time available in English, though this version will not be legally binding if a patent application was filed in German or French. When the transition period elapses, it will not be required to enclose an English version, then automatic translations will be available, which will facilitate patent searches <sup>104</sup> . However, most likely the automatic translations system will not enable correct translation of a patent description (e.g. rendering the sense in the context). Therefore, patent clearance search will require assistance of a translator. For these reasons the costs of searches of UEP will be higher than costs of searches of patent available in the database of the PPO.  Concurrently, the number of valid patents is higher than in the case of Option 0.	
	The cost of patent search will be higher in case of Option 1; likewise, the number of patents subject to the search will be higher in case of Option 1. Therefore, <b>the costs</b>		

<sup>103</sup> See footnote above

<sup>104</sup> For more information on the automatic translations system see chapter 4.4.2.

Option 0		Option 1
	<p><b>of patent clearance searches will be higher in case of Option1.</b> In accordance with the assumptions, the costs in case of Option 1 will be 10 to 40 times higher than in case of Option 0 (depending on the sensitivity analysis defined by a specific scenario)<sup>105</sup>.</p>	
Costs of adjustment	<p>In case of Option 0, if Poland does not implement unitary patent and does not ratify the Agreement on the UPC, the system of unitary European patent will be established in 24 EU states<sup>106</sup> (except for Poland, Spain and Italy).</p> <p>Because Polish businessmen may be interested in applying for UEP, the costs of adjustment cover the costs of trainings for interested businessmen, patent attorneys and lawyers<sup>107</sup>.</p>	<p>In case of Option 1 the costs of adjustment cover the costs of trainings for interested businessmen, for patent attorneys and lawyers, the PPO’s employees or any other interested parties<sup>108</sup>.</p> <p>Concurrently, the costs of adjustment include the costs of setting up a local division of First Instance of the Unified Patent Court in Poland. This division will conduct proceedings for infringements which take place in Poland. 3 judges from a group of available patent judges will hear each case. Ultimately the cost of the court functioning will be financed from the court fees; only the infrastructural costs will be covered from the State budget. Additionally, before the court functioning based on court fees is possible (in the case of local, regional and central divisions of First Instance of the UPC), Member States will jointly cover the costs of maintenance of this court.</p>
	<p>The costs of adjustment include the costs of trainings in case of both Options. They also include the costs of creating a local division of First Instance of UPC in Poland in case of Option 1. For these reasons, <b>the costs of adjustment will be higher in case of Option 1.</b> In accordance with the assumptions, the costs in case of Option 1 will be approximately 25 times higher than in case of Option 0<sup>109</sup></p>	

#### 4.4. Cost/benefit analysis

##### 4.4.1. Methodological assumptions

Below are methodological assumptions made, divided into:

- General assumptions
- Assumptions on the estimated number of patents

<sup>105</sup> Main methodological assumptions and results of the calculation of costs and benefits are described in chapter 4.5. Calculation of costs and benefits - comparison of options.

<sup>106</sup> We assume that no other state will withdraw from the UEP system.

<sup>107</sup> The costs were estimated on the basis of the Guidelines for Regulation Impact Assessment, which indicate that: We can also estimate the cost of work required to study the new regulations, training, and the work time they consume. Such an estimation is possible as soon as we learn how many enterprises/institutions will be affected by the new regulation and how many people will get trained during some period of time." (Translation of the Guidelines for Regulation Impact Assessment of the Ministry of Economy, 2006, p.45)

<sup>108</sup> See footnote above.

<sup>109</sup> Main methodological assumptions and the results of the calculation of costs and benefits are described in chapter 4.5. Calculation of costs and benefits – comparison of options.

- Assumptions on calculation of individual cost and benefit values.

## General assumptions

1. **Only those costs and benefits which differ between the options have been taken into account.** Because of this it should not be assumed that all prospective costs and benefits for each option have been considered.
2. Due to the fact that it is difficult to indicate precise figures related to an anticipated number of patents and development of innovativeness of Polish businesses, **we introduced a sensitivity analysis based on scenarios.**
3. An especially relevant circumstance has been taken into account that **even if Poland does not accede to the enhanced cooperation and even if it does not ratify the Agreement on the UPC, Polish businessmen will be able to take advantage of the UEP**, which - we assumed – will be binding in 24 countries (the EU without Poland, Spain and Italy).
4. A situation when the unitary European patent system is not implemented in any or some of the above-mentioned states has not been considered.
5. It has been assumed that 2014 will be the first year under analysis<sup>110</sup>.
6. First patents with unitary effect will become valid from the year 2018 (it has been assumed that it will take the EPO 4 years to analyze patent applications).
7. It has been assumed that a local division of First Instance of UPC will be established in Poland.
8. The assumed inflation rate is 3.6%.
9. The assumed exchange rate is PLN/EUR is 4.2

The following assumptions as to the scenarios have been made:

- A. Optimistic scenario.** It is assumed that Polish businesses will be very innovative, they will develop much faster than they do now, and that the growth rate of new patent applications filed by Polish businesses will be much higher than that of the patents filed by foreign businesses. At the same time, the scenario assumes that businesses will be increasingly aware of potential infringement; therefore an increasing number of businesses will be trained in the area of intellectual property protection rights and will peruse available patent databases.
- B. Moderate scenario.** It is assumed that Polish businesses will become increasingly innovative, and develop faster than foreign businesses, but more slowly than in the optimistic scenario. The interest in trainings in the area of intellectual property protection rights will also increase, and more businesses will peruse patent databases.
- C. Pessimistic scenario.** Innovativeness of Polish businesses will increase, though the increase will be slower than in previous scenarios. The rate of filing patent applications by Polish businesses will be slower than today, though it will still be faster than the rate of filing patent applications by foreign entities. It is assumed that businesses' awareness of potential patent infringements will be unchanged as will be the number of businesses which peruse patent databases.

## Assumptions on the estimated number of patents

To estimate the value of the costs and benefits, firstly it is necessary to estimate the number of valid patents in a specific year in which the analysis is conducted. It is noteworthy that here we indicated the number of valid patents in a specific year, not the number of new patents which become valid. Valid patents in a specific year are a sum of patents granted within 9 years preceding a specific year and in this specific year (10 years in total) according to an assumption that an average "life expectancy" of a patent is 10 years<sup>111</sup>.

Below are specific assumptions as regards estimations of the number of patents.

1. The number of the UEPs (irrespective of the option) - is the number of European patents with unitary effect which are valid in states acceding to enhanced cooperation and ratifying the Agreement on the UPC (the number of UEPs binding in Poland in case of Option 1, or outside Poland in case of Option

<sup>110</sup> On the basis of "Detailed Description of the Work" - attachment 3 to the Agreement for preparation of this analysis.

<sup>111</sup> On the basis of the Commission Staff Working Paper Impact Assessment Accompanying document to the Proposal for a Regulation Of The European Parliament And The Council implementing enhanced cooperation in the area of creation of unitary patent protection and Proposal for a Council Regulation implementing enhanced cooperation in the area of the creation of the unitary patent protection with regard to the applicable translation arrangements {COM(2011) 215}, {COM(2011) 216}, {COM(2011) 483}, Brussels, SEC(2011) 482/2 (the document further referred to "OSR KE") and on the basis of the information obtained from the interviews.

- 0)<sup>112</sup>:
- a) The growth rate of patents – 2.2%<sup>113</sup> per annum in the period of 20 years (years 2014-2033) and 1.1% per annum after the period of 20 years (2034-2043).
  - b) Of all patents (European and UEPs) 98% will be filed as UEPs<sup>114</sup>.
2. The number of patents validated in Poland under Option 0 (Poland does not accede to the UEP system, and unitary European patents are not valid in Poland)<sup>115</sup>:
- a) Due to the fact that still some entities will be interested in protection of their rights in Poland, they will concurrently file applications for EUPs and for European patents which subsequently will be validated in Poland.
  - b) We assume a dropping growth rate of patents: from 24%<sup>116</sup> to 1.1% (as in the case of the UEP).
3. The number of patents validated in Poland in case of Option 1<sup>117</sup>:
- a) UEPs are valid in Poland; therefore only a small number of patents will be validated as European patents - 2%<sup>118</sup>
  - b) We assume that 10% of European patents will be validated in Poland<sup>119</sup>.
4. The number of UEPs obtained by Polish businesses<sup>120</sup>:
- a) In case of Option 0 we assume that the growth rate of patents will be 15%<sup>121</sup>, and after 12 years - 8%.
  - b) According to the optimistic scenario for Option 1 we assume that the growth rate of patents will be 25%, and after 12 years - 12%.
  - c) According to the moderate scenario for Option 1 we assume that the growth rate of patents will be 15%, and after 12 years - 8%.
  - d) In case of the pessimistic scenario for Option 1 we assume that the growth rate of patents will be 10%, and after 12 years 5%.
  - e) Irrespective of the option or scenario, the growth rate of UEPs obtained by Polish businessmen is higher than that of UEPs in general. This follows from an assumption that even in the pessimistic scenario Polish businesses will develop innovativeness faster than foreign businesses because we depart from a very low number of filed patents.
  - f) We assume that some Polish businesses will still file applications also for a European patent because in case a business is interested in reaching 1-3 EU markets, this will still be a cheaper solution.

#### **Assumptions on calculation of individual cost/benefit values.**

1. Benefits for the State budget:
  - a) In the case of revenues from patent applications in Option 0 we calculate the revenues related to validation of European patents in Poland. We take into account the fee currently paid to the PPO and the inflation rate. Subsequently, we assume that 50% of the fees is allocated to cover the costs of maintenance of the PPO, the remaining 50% is additional state budget revenue.
  - b) in the case of revenues from patent maintenance in Option 0 we calculate the revenues related to maintenance of European patents validated in Poland. We take into account the fee currently paid to the PPO and the inflation rate. Subsequently, we assume that 50% of the fees

<sup>112</sup> Estimated number of patents is presented in chapter 4.5. Calculation of costs and benefits - comparison of options.

<sup>113</sup> An average growth rate of European patents granted between 2007 and 2011, data from the EPO.

<sup>114</sup> Preliminary Findings of DG Internal Market and Services - Study on the Caseload and Financing of the Unified Patent Court, 2011.

<sup>115</sup> Estimated number of patents are discussed in chapter 4.5. Calculation of costs and benefits - comparison of options.

<sup>116</sup> An average growth rate of European patents validated in Poland in 2008-2011, data from the EPO.

<sup>117</sup> Estimated number of patents is discussed in chapter 4.5. Cost-Benefit calculation - comparison of options.

<sup>118</sup> Preliminary Findings of DG Internal Market and Services - Study on the Caseload and Financing of the Unified Patent Court, 2011

<sup>119</sup> At present these values depend on a year season, 5-10%, data from the EPO and the PPO.

<sup>120</sup> Estimated number of patents is presented in chapter 4.5. Calculation of costs and benefits - comparison of options.

<sup>121</sup> An average growth rate of patents granted to Polish entities between 2007 and 2011, data from the EPO.

is allocated to cover the costs of maintenance of the PPO, the remaining 50% is additional state budget revenue.

- c) In the case of revenues from patent applications in Option 1 we calculate the revenues related to validation of the European patents in Poland. We take into account the fee currently paid to the PPO and the inflation rate. Subsequently, we assume that 50% of the fees is allocated to cover the costs of maintenance of the PPO, the remaining 50% is additional state budget revenue. We take into account the fee currently paid to the EPO and the inflation rate. Subsequently, we assume that 50% of the fees is allocated to cover the costs of maintenance of the EPO, the remaining 50% is distributed among Member States. We assume that a criterion of such division is the share of a given state in the GDP of the acceding states<sup>122</sup>. The sum of those two streams generates the state budget revenue from patent applications.
- d) In the case of revenues from patent maintenance in Option 1 we calculate the revenue related to maintenance of the European patents in Poland. We take into account the fee currently paid to the PPO and the inflation rate. Then, we assume that 50% of the fees is allocated to cover the costs of the PPO's maintenance, the remaining 50% is additional state revenue. Moreover, we take into account the revenues from the UEP maintenance paid in EPO. We take into account the fee currently paid to EPO in the amount of EUR 7 500 for 10 years<sup>123</sup> and the inflation rate. Next, we assume that 50% of the fees covers the EPO maintenance costs, therefore, the remaining 50% is distributed among Member States. We assume that a criterion of such distribution is the share of a given state in the GDP of the acceding states<sup>124</sup>. The sum generated from these two sources is the state budget revenue from the patent maintenance.

## 2. Costs of court proceedings

- a) Both in Option 0 and in Option 1 we assume that the likelihood of court proceedings is 0.24% of the number of patents valid in the market<sup>125</sup>.
- b) The costs of court proceedings include court fees, costs of legal representation, costs of time spent and potentially costs of translators/interpreters.<sup>126</sup>
- c) We assume that the costs of one court proceedings conducted in Poland in 2014 is PLN 150 000<sup>127</sup>. Subsequently, to estimate the value for subsequent years we apply the inflation rate.
- d) We assume that the costs of one court proceedings conducted outside Poland in 2014 is PLN 819 000 PLN<sup>128</sup>. Subsequently, to estimate the value for subsequent years, we apply the inflation rate.
- e) We assume that 50% of court proceedings is referred to Second Instance (both conducted in Poland and abroad)<sup>129</sup>.

## 3. Costs of licence purchase:

- a) For the purpose of this analysis we assume that licences are used by businessmen as a protective measure against patent infringements, and purchase thereof is not related to the increased business innovativeness. Licence purchase, for the purpose of this calculation, is equivalent to other possible options related to claims for patent infringement, e.g. termination

<sup>122</sup> We assume that the share of Poland in 2014 will be at the present level of 3.7% (GDP of Poland with respect to GDP of EU 25, without Spain and Italy, own estimations based on the Eurostat data). We assume that the rate of development of Poland will be higher than that of the EU25, and for those reasons, this share will amount to 8.1% in 2043.

<sup>123</sup> Under art. 15.3.a of the Proposal for Regulation on the unitary patent the renewal fees shall be the same as the renewal fees for protection which is currently ensured by European patents which have an average geographical extent. We assume that this extent covers 5 states with the highest number of validations, and for those reasons in accordance with OSR EC, we assume the value of EUR 7 500 - which is the value as for 5 states with the highest number of validations.

<sup>124</sup> We assume that the share of Poland in 2014 will be at the present level of 3.7% (GDP of Poland with respect to the EU 25 GDP, without Spain and Italy, own estimations based on the Eurostat data). We assume that the rate of development of Poland will be higher than of the EU25, and for those reasons, this share will amount to 8.1% in 2043.

<sup>125</sup> Preliminary Findings of DG Internal Market and Services - Study on the Caseload and Financing of the Unified Patent Court, 2011

<sup>126</sup> The costs related to application of securing measures have not been taken into account.

<sup>127</sup> Data from the interviews.

<sup>128</sup> Data from the interviews and information on the website of the Ministry of Economy, <http://mg.gov.pl/node/16508#1>

<sup>129</sup> Own estimations based on the data from: Patent Litigation Insurance. A study for the European Commission on the feasibility of possible insurance schemes against patent litigation risks. Appendices to the final report. June 2006, CJA Consultants Ltd European Policy Advisers Britain and Brussels.



of the activity which is the object of such claims or performing additional actions which enable effective avoidance of claims for patent infringements.

- b) We assume that an average purchase value of one licence is PLN 822 000<sup>130</sup>. Subsequently, to calculate an average purchase value of one licence in subsequent years we apply the inflation rate.
- c) In the case of Option 0 we assume that the number of licences is 11% of the valid patents<sup>131</sup>.
- d) In the case of the optimistic scenario in Option 1 we assume that the number of licences amounts to 9% of the valid patents.
- e) In the case of the moderate scenario in Option 1 we assume that the number of licences amounts to 11% of the valid patents.
- f) In the case of the pessimistic scenario in Option 1 we assume that the number of licences amounts to 13% of the valid patents.

4. Costs of patent clearance search:

- a) It has been considered that SMEs and large companies will incur different costs.
- b) For SMEs, it has been assumed that an average cost of patent clearance search per annum per business is PLN 2 000<sup>132</sup>. (Option 0 and Option 1 in the years 2014-2017) and PLN 10 000<sup>133</sup> (Option 1 from 2018).
- c) For large companies it has been assumed that an average cost of patent clearance search per annum per business is PLN 60 000<sup>134</sup>. (Option 0 and Option 1 in the years 2014-2017) and PLN 120 000<sup>135</sup> (Option 1 from 2018).
- d) It has been assumed that the number of businesses that at present perform patent clearance searches is: 907 SMEs and 281 large companies<sup>136</sup>.
- e) It has been assumed that in case of Option 0 patent clearance searches will be done by the same number of businesses as they are done now.
- f) It has been assumed that in case of the optimistic scenario in Option 1 patent clearance searches will be done by 4 times more businesses than now.
- g) It has been assumed that in case of the moderate scenario in Option 1 patent clearance searches will be done by 2 times more businesses than now.
- h) It has been assumed that in case of the pessimistic scenario in Option 1 patent clearance searches will be performed by the same number of businesses as now.

5. Costs of adjustment:

- a) The costs of adjustment include the costs of trainings (Option 0 and Option 1) and the costs of maintaining a local division of First Instance of the UPC in Poland (Option 1).

<sup>130</sup> This is an average value of one sold license in 2012 (data from "Nauka i Technika 2010" ["Science and Technology 2010"], CSO). We assume the cost of one purchased license to be the same. We assume this to be the cost of license purchase for the whole period of patent validity (74% of license agreements are concluded for a period which corresponds to the patent protection period; see: Tamowicz Piotr, Licencja jako droga poprawy innowacyjności i konkurencyjności polskich przedsiębiorstw. Analiza stanu istniejącego oraz istniejące bariery, Ministerstwo Gospodarki, Gdańsk 2006 [License - a way to improve innovativeness and competitiveness of businesses. Analysis of the existing state and the existing barriers], the Ministry of Economy, Gdańsk 2006). By comparison an average cost of license purchase in the United States is USD 987 225 USD (data without 3 most expensive licenses; <http://ezinearticles.com/PROyalty-Rates-and-License-Fees-Patent-Damages-Expert-Witness&id=3350179>).

<sup>131</sup> Data shows the values between 9% and 13%.

- own estimations based on the CSO's data from "Nauka i Technika 2010" ["Science and Technology 2010"]
- own estimations based on data from WIPO,
- Gambardella Alfonso, Giuri Paola, Mariani Myriam, "Study on evaluation the knowledge economy what are patents actually worth? The value of patents for today's economy and society, European Commission, 2006.

<sup>132</sup> Data from the interviews.

<sup>133</sup> A significant growth of costs has been assumed because of a necessity to translate patent descriptions and patent claims. Even if the automatic translations system is implemented, businesses will have to use translators' services. More information on this in chapter 4.4.3. Analysis of the functioning of the proposed system of machine translations of patent documentation, which includes analysis of costs of translations of European patent and its effect on the cost of obtaining protection of a European patent for SMEs. Higher translation costs will adversely affect SMEs; such reasoning is confirmed in the document of the Ministry of Economy "Guidelines for Regulation Impact Assessment" according to which most regulations have stronger impact on SME than on large corporations even if they seem to give them equal treatment. This is because SMEs are not so good in adjusting to change (fewer human and financial resources).

<sup>134</sup> Data from the interviews.

<sup>135</sup> Double increase of costs because of a necessity to translate patent descriptions and patent claims.

<sup>136</sup> Own calculation based on the data from the report of CSO „Działalność innowacyjna przedsiębiorstw w latach 2008-2010” [„Innovative activity of businesses in the years 2008-2010”]. Industrial businesses were included, whereas businesses related to services were not included.

- b) It has been assumed that an average cost of one training for one person is PLN 2 000 in 2014. For the following years the inflation has been taken into account.
- c) It has been assumed that the number of persons who are trained consists of a population of patent attorneys, the PPO's employees and representatives of businesses (but only those businesses which conduct patent clearance searches)<sup>137</sup>.
- d) In the case of costs of maintenance of a local division of First Instance of the UPC in Poland, it has been assumed that this court will have been able to finance its activity alone by the year 2014.
- e) In the period between 2014 and 2023 it has been assumed that the cost of maintenance of this court includes remuneration of judges and also administrative and infrastructural costs. The number of judges has been estimated on the basis of an estimated number of court proceedings. The data on costs come from a presentation of the European Commission<sup>138</sup>.
- f) In the period from 2024 it has been assumed that the cost of maintaining this court includes only infrastructural costs which amount to 15% of remuneration of judges<sup>139</sup>. The number of judges was estimated on the basis of an estimated number of court proceedings. The data on costs come from the presentation of the European Commission<sup>140</sup>.

#### 4.4.2. Analysis of use of patent information, which includes the information in foreign languages, by SMS's scientific centres and other entities and availability of it in different languages

Patent information is a collection of any kind of publications of patent offices (national and regional) and international organizations. It includes descriptions of inventions for which patent applications have been filed and descriptions of inventions to which exclusive rights have already been granted (e.g. patent descriptions). Use of patent information provides a user with access to up-to-dated and detailed information on the most recent technical solutions. Patent information is mainly used by scientific centres which conduct scientific research and businessmen who are interested in e.g. patenting of own solutions. According to the statistics of the European Patent Office, approximately 60 thousand scientific and technical publications, 100 thousand scientific and technical books, several hundred thousand academic papers and over 3 million patent documents are published yearly in the world. It must also be emphasized that as much as 85% of technical knowledge published in the world comes exclusively from patent documents<sup>141</sup>.

The sources of patent information in Poland are the databases of the Polish Patent Office. Documents may be perused on the PPO's website by use of the tool "Simple Search" which enables data search based on a phrase entered in the editorial space. The search is performed according to the following criteria:

- title or name,
- abstract of description or list of goods,
- number of exclusive right,
- application number,
- holder's name.

An option of an advanced search and a search according to criteria applied is also available. Moreover, by using the Server of Publications it is possible to find translations of European patents valid in Poland as well as Polish

<sup>137</sup> Sources of data on population:

- "Działalność innowacyjna przedsiębiorstw w latach 2008-2010" ["Innovative activity of businesses in the years 2008-2010"], CSO
- REGON register available at CSO,
- "Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce. 2011, Polska Agencja Rozwoju Przedsiębiorczości", 2011 ["Report on the status of the small and medium-sized businesses", Polish Agency for Enterprise Development,
- The website of The Polish Chamber of Patent Attorneys,
- data from the Polish Patent Office,
- Sektor badawczo-rozwojowy w Polsce, Polska Agencja Informacji i Inwestycji Zagranicznych S.A. ["The research and development sector in Poland", the Polish Information and Foreign Investment Agency]
- "Research and development sector in Poland", Polish Information and Foreign Investment Agency S.A.,
- Działalność przedsiębiorstw niefinansowych w 2009" ["Activity of non-financial companies in 2009"], Central Statistical Office

<sup>138</sup> Study on the Financing of the UPC. State of play. Olivér Varhelyi, Head of Unit, Industrial Property Rights Unit in DG MARKT, October 2011.

<sup>139</sup> See footnote 138 above.

<sup>140</sup> See footnote 138 above

<sup>141</sup> Information from the website of Enterprise Europe Network, prepared by the PPO.

patent descriptions - which have been published by the Polish Patent Office since 1924.

The European Patent Office has made available its own database (Espacenet). Espacenet offers access to over 70 million patent documents worldwide which date back to the year 1876. The database is available in English, German and French. Apart from patent documents, the service provides access to the following information:

- patent families (by which it is possible to check if in other states patents for similar inventions have been granted),
- information on the legal status,
- references to non-patent literature,
- citations (in scientific publications).

There is also a possibility of obtaining automatic notifications of new applications from a chosen area of technology.

On the EPO website also the European Patent Register is available. It enables a check of a legal status of an application filed with the EPO and it contains all publicly available information on European patent applications with regard to patent granting procedure, procedure of filing of a notice of opposition and exchange of correspondence between an applicant and the EPO.

The World Intellectual Property Organization (WIPO), in turn, provides access to the patent database - Patentscope which contains over one million patent documents, including almost two million international patent applications. A search can be conducted according to various criteria which include: key words on the first page or in the whole text of an application, application number, IPC symbol, name of an applicant, inventor or representative, date of filing an application, etc.

It results from the information obtained from businessmen during the interviews that they use both national and foreign databases, in the majority of cases the Espacenet. They are of the opinion that availability of patent information is rather good. In some cases they indicated a limitation related to insufficient knowledge of a foreign language where it is necessary to understand details of a patent description.

An advantage of the Polish database is that it is available in Polish; its disadvantages, in turn, are:

- limited options of searching for information,
- irregular updates,
- unattractive interface.

As regards the European database attention was drawn to the fact that it is more user-friendly, it has a bigger scope of available knowledge and regular updates.

When analyzing frequency of use of the databases by businesses, it must be stated that it is very diversified. Some use databases only when they file patent applications, others 2-3 times per year, yet another group once a week. Big businesses employ patent attorneys to continuously monitor patent situation or delegate this task to a particular employee. Some businesses (mostly SMEs) commission patent attorneys to do the search, and the costs of patent clearance search are negotiated each time. Businesses also use the PPO bulletin.

Employees who are responsible for monitoring the patent situation, as a rule, check titles of patent applications in the market sector in which a business operates. It enables them to follow the latest technical achievements in a given sector, and conditions the possibility of commercial exploitation of own solutions without risking liability for potential infringements of third parties' rights. It is particularly important to exporters who plan sales of own products abroad and for businessmen who plan to launch a new product or technology. Thanks to the patent clearance search it is possible to minimize the risk of infringement of third parties' patent rights and avoid court proceedings and high costs of damages. The check of patent databases is crucial for some businessmen as it enables them to assess whether they can use solutions the protection rights of which already expired, and which, therefore, may be marketed or may provide useful information when

deciding about purchasing of a licence. On the other hand, patent databases enable monitoring of competitors or use of the work results obtained by competitors to create own solutions at a more advanced level. An analysis of patent activity of competitors facilitates anticipation of their business decisions, and it renders it possible to eliminate competition from the market at an early stage, when an application filed by a competitor infringes an existing right of protection.

Awareness of the necessity of monitoring patent clearance increases in businesses from the sectors with high numbers of patents (e.g. pharmaceutical sector) or those which file many patent applications. They often go far beyond reading titles of patent applications, and meticulously analyze patent descriptions and claims, which - in some instances - takes specialists several days, and requires assistance of a translator.

Scientific centres (because of the activity they conduct, e.g. through cooperation with other scientific centres in the world, joint scientific projects, more financial means for research and development) have similar or even greater access to the latest technical information, which includes patent databases. English is commonly used in the world of science (i.a. because of a possibility to improve this language during academic scholarships), and numerous publications in foreign languages (mostly in English) confirm that Polish scientists have no problems with this respect.

#### **4.4.3. Analysis of the functioning of the proposed system of machine translations of patent documentation, which includes analysis of costs of translations of the European patent and its effect on the cost of obtaining protection of the European patent for SMEs**

The automatic translations system is a process of translating one language into another by application of computer software. To ensure better access to patent documents The European Commission and the EPO have launched a service of automatic translations of patent documents available in the EPO database named Patent Translate. This service is free and available via the EPO website. The service applies the technology Google's Translate and currently enables translations from and into: English, French, German, Spanish, Italian, Portuguese and Swedish. This currently covers approximately 90% of all patents approved in Europe. By the end of 2014 the service will translate patent documentation into 28 languages of European states and into Chinese, Japanese, Korean and Russian.

After the "patent pack" takes effect, it will be possible to file patent documentation only in one of the three official languages: English, French or German. The proposal for the regulation provides for the so-called transitional period (12 years), during which time where the language of proceedings before the EPO is either French or German, an application for a unitary European patent should be accompanied by full by-hand translation of a patent specification into English or into any official language of a Member State which is an official language of the European Union if English is the language of proceedings<sup>142</sup>. When the transitional period elapses, businessmen will have an opportunity to submit documentation only in one of the official languages of their choice. If a businessman wishes to verify whether his business does not infringe patent rights of any entity under the unitary European patent, he will be able to verify the patent documentation in an original language (one of the above-mentioned three official languages) available in the EPO database by means of Patent Translate - the system of automatic translations of patent documentation. It is expected that thanks to this system a businessman will be able to access translations of patent documents in his national language.

Patent Translate is a specifically designed extended patent vocabulary and grammar service. The system operates on the basis of a statistical approach. The system translates by comparing sentence by sentence from a source document to millions of patent documents which have previously been translated by human

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<sup>142</sup> However, the only legally binding language version of patent documentation is the language version of the application i.e. an English, German or French version.

translators for the purposes of preparing patent specifications. The system is equipped with a "learning" facility based on official patent documents collected by the EPO in cooperation with patent offices in Member States in the scope of technical phrases and specific style of patent documentation.

A solution proposed together by the European Commission and the EPO entails certain consequences. On the one hand, the launch of the system of automatic translation of patent documentation is a tool which will establish a leading role of the EPO as one of the biggest providers of patent data free of charge, and ensure improved access to technical information from the patent documentation regardless of a language of its user. Providing broad access to high quality patent data is crucial for the development of industry, implementation of innovativeness, and economic growth. On the other hand, the quality of current automatic translations leaves much to be desired. Apart from limitations of automatic translation related to syntax, idioms and a proper context of a given passage, under the applied statistical approach, the main difficulty is specific technical knowledge and use of correct terminology typical of a particular area.

The EPO explains that automatic translation by Patent Translate may not provide a legally binding translation but it is aimed to approximate the essence of a given text and to be helpful in determining whether a given document is relevant in an area in which a given entity operates. Automatic translation is aimed to assist a businessman when deciding whether a given passage of a patent documentation should be translated for the purposes of his business and whether it is worth investing in a professional translator. This means that in some cases businessmen will have to incur costs of translations.

For the purpose of this analysis Patent Translate was subject to a test. Due to the fact that the system still does not operate in Polish, the test was done by a German-speaking person. For the test we selected a patent description originally submitted in German which was subsequently translated into English. The key conclusions drawn from the analysis of the quality of the translation are as follows:

1. Wide scope of terms in Patent Translate is noticeable - the system knows many complex words and ensures good quality of translation in this respect.
2. Very often the structure of sentences does not reflect their full sense. Where there were compound-complex sentences in the original German version of the documentation, Patent Translate failed to render their meaning. To convey a full meaning of the translated text, compound-complex sentences should be translated into English as split two or three simple sentences.
3. The main problem is to convey the context of a sentence. Separate words are translated correctly but fail to convey the full context.
4. It happens that verbs are omitted, especially in very complex sentences.
5. Sometimes individual words/proper names are left untranslated.
6. Because of the fact that in most cases patent descriptions are drafted in the present tense, no problems related to tenses have been observed.

The above analysis proves that the main problems include conveying the context and sense of complex sentences, which is a common problem in automatic translations.

The EPO's current activities with regard to Patent Translate are aimed to ensure high quality of translations in the future, and this is why the system undergoes continuous development. New documents will be added to the databases of the automatic system of patent documentation of the EPO each year in order to enrich those databases with the information which is expected to ensure improvement of proper functioning of this system. At present, persons who use the system may also submit comments on the quality of automatic translations obtained from the system. It is not certain, however, whether the system will be able to provide the quality of translations at a level which is necessary to verify patent information after the transitional period.

Small and medium-size enterprises which will use the EPO automatic translations system will be able to easily access general information or search for patents related to a specific area or a specific word. It must be pointed out, however, that the number of patents which are valid in a specific area is already high, and it is likely to increase. For example, there are 340 patents which contain the word LED submitted by Philips<sup>143</sup>.

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<sup>143</sup> <https://register.epo.org/espacenet/advancedSearch?searchMode=advanced&pn=&ap=&fd=&pd=&pr=&prd=&pa=Philips&in=&re>

Therefore, a small or a medium-sized business which is interested in production of devices which use LED, may require that at least 340 patents be perused and translated to be sure that production of those devices will not infringe the intellectual property rights.

The tool Patent Translate, as indicated above, does not have relevant functionalities to be able to translate correctly the whole patent documentation. An average cost of translation of one page of patent documentation is PLN 68<sup>144</sup>. Where patent documentation is 30 pages long, an average cost of translation of the documentation for one patent will amount to PLN 2000. It is also noteworthy that because of the specificity of technical terminology of a patent description, a translator may also need to cooperate with an employee of a commissioning entity, which further entails his spending time over the translation, and thus generates additional costs to be incurred by small and medium-sized enterprises. Another very important consequence of the proposed system is the fact that a translated version of patent claims will not be legally binding. Therefore, if any part of a patent description or patent claims is not translated correctly, this may entail far-reaching consequences. A businessman, who acts in good faith, may unconsciously infringe another person's rights, and as a result, may suffer consequences of those infringements, e.g. a lawsuit may be filed against him.

SMEs which will apply for the UEP file an application in their national language and enclose translation into one of the three official languages. Most frequently the language of choice will be English as the most popular business language. The costs of translations are to be reimbursed to the applicants. Therefore, SMEs which will apply for the UEP will incur the additional costs (as compared to SMEs from those states where the national languages are English or German or French) only related to the time spent on arranging for and checking a translation and on applying for reimbursement of costs.

#### **4.4.4. Estimation of the number of potential court proceedings related to the unitary patent and the European patent which result from the unitary patent protection system and estimated (potential) costs of court disputes**

By being granted a patent an owner obtains a monopoly for economic exploitation of a solution protected by that monopoly, and at the same time he enjoys the right to prohibit third parties from such exploitation<sup>145</sup>. A patent infringement is an unauthorized person's use of an invention for profit or professional purposes. A patent infringement entitles a patent holder to raise specific claims. If a patent with unitary effect is implemented in Poland, the territory over which the patent holder's monopoly will extend, and thereby his possibility to pursue infringements and claim damages will be respectively greater than it is now. It must be taken into account that the number of patents which are valid in Poland will increase. It results from the analyses conducted at the request of the European Commission that from the beginning of the year 2015 as many as 600 000 European patents may be valid in one Member State.

The European Commission indicates that the number of patents and the general number of court proceedings related to patents in Europe in the recent decade rose parallelly. A similar observation applies to European patents and related court proceedings<sup>146</sup>. On the basis of the number of European patents valid in 2008 and the number of conducted court proceedings, The Commission also assumes that the probability of court proceedings related to the European patent is 0.24% of the number of valid patents. Therefore, the higher the number of European patents with unitary effect which will be valid in Poland, the higher the number of related court proceedings. For example, in 2009 in Germany - the country where the number of valid patents is the highest is Europe, First Instance court heard 1 137 cases related to infringement.

The data obtained from the Adjudication Department of the Polish Patent Office show that in the year 2011 - 54 patent litigation cases were initiated, two of which concerned the European patent. In the years 2009-2012 the PPO received 6 motions for revocation of a European patent: 2 cases were concluded by dismissing the

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<sup>144</sup> Data obtained from several Polish Translation Agencies

<sup>145</sup> This is stipulated in Art. 63 of the Intellectual Property Law Act dated 3 June 2000 and Art. 6 of the Proposal for Regulation on the unitary patent.

<sup>146</sup> Preliminary Findings of DG Market and Services Study on the Caseload and financing of the Unified Patent Court, 2011.

motions, but in both those cases, following complaints against the decisions filed with the Regional Administrative Court, the decisions on dismissal were considered to be invalid; 4 remaining cases are pending. As regards cases in civil courts, in the years 2009-2011 the Commercial Divisions of Regional Courts registered 219 cases related to the industrial property law regarding inventions, i.e. on average one case per year. According to the calculations based on the data obtained from the PPO, litigious proceedings constitute 0.26% of patents and protection rights for utility designs which are now valid in Poland, whereas the number of cases in civil courts approximately amounts to 0.35% of valid patents and protection rights for utility designs.

Following the assumption of the European Commission on the probability of a court case at the level of 0.24% of the number of valid patents, and considering an increasing inflow of UEPs in Poland, approximately 70 000 new patents with unitary effect per year, the number of court cases before First Instance of the Unified Patent Court which involve Polish businesses in the 20<sup>th</sup> year of the analysis may amount to approximately 2 000 cases, whereas in the 30<sup>th</sup> year of the analysis –approximately 2 500 cases.

The second issue which should be analyzed are the average costs which have to be incurred in the course of court proceedings. It follows from the information obtained from interviews with businessmen that the costs of court proceedings are excessively high, whereas the proceedings are long (up to several years from initiation of the proceedings to delivering a judgment). Moreover, especially in the case of big companies listed on the stock exchange, a public notification of an infringement is crucial for the business image; it adversely affects the brand and it may directly influence sales and a financial result. For SMEs the costs of court proceedings may be an excessive burden. Therefore, some companies do not engage in court proceedings. In other words, if their right has been infringed, they do not act against the infringer; if they infringed a patent of another business, they attempt to negotiate and avoid a court dispute, e.g. by purchasing a licence or simply withdrawing a product from the market.

Average costs (which include court fees, professional fees of patent attorneys or lawyers) of one court proceedings in Poland amount to PLN 150 000, whereas outside Poland (including the above costs components plus the costs of translations of documents and travel costs) range from PLN 600 000 to PLN 1 million<sup>147</sup>.

Presently the fees in the UPC are not known. Multiple variants are possible which depend on whether the states which ratify the Agreement on the UPC will cover the costs of maintenance of that court and its divisions or the court will have to maintain itself from the fees. Possible amounts of court fees are presented below<sup>148</sup>.

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<sup>147</sup> Based on the data obtained during interviews with businessmen. Data on the costs of court proceedings outside Poland are also available at the website of the Ministry of Economy: <http://www.mg.gov.pl/Wspieranie-przedsiębiorczości/Jednolity-patent+europejski>.

<sup>148</sup> These fees are high as compared to the fees paid in national courts. However, a decision of the UPC will bind in all states where UEP has been implemented, which may save other costs incurred by businesses.

**Table 12. Possible amounts of court fees in the Unified Patent Court**

	Low court fees scenario	Average court fees scenario	High court fees scenario
Claim for infringement	EUR 3 000	EUR 6 000	EUR 12 000
Counterclaim for revocation	EUR 2 000	EUR 4 000	EUR 7 000
Claim for patent revocation	EUR 3 000	EUR 6 000	EUR 12 000
Appeal	EUR 6 000	EUR 9 000	EUR 20 000
Interlocutory order	EUR 3 000	EUR 4 500	EUR 10 000

Source: Preliminary Findings of DG Internal Market and Services Study on the Caseload and financing of the Unified Patent Court, 2011

Those businesses which currently operate in the area of high density of protection rights, e.g. pharmaceutical<sup>149</sup>, chemical, biochemical, electronic companies are more likely to engage in court proceedings. Therefore, businessmen would frequently express concerns related to a rapid increase in the number of patents with unitary effect which are valid in Poland, which entails potential infringements and court proceedings.

Creation of a local division of the UPC of First Instance also entails certain costs related to infrastructure for this court. Remuneration of judges is to be covered from court fees. In the initial period, however, before the court is able pay the costs related to its functioning from the court fees, Member States will participate in the court maintenance costs.

Below is the estimated number of court proceedings and the costs to be incurred by the state budget related to the functioning of a local division of First Instance of UPC in Poland in case of Option 1 (implementation of the unitary patent in Poland and ratification of the Agreement of the UPC).

**Table 13. The estimated number of court proceedings and estimated costs for the state budget related to the functioning of a local division of First Instance of the UPC in Poland**

Year	2024	2033	2043
Estimated number of court proceedings in case of Option 1 (court proceedings before a local division of First Instance of the UPC and before the Second Instance of the UPC in Luxembourg)	1 399	2 154	2 518
Estimated costs of maintaining a local division of the UPC in Poland in case of Option 1 (infrastructure costs) <sup>150</sup> [PLN]	2 887 602	4 446 502	5 198 083

Source: Own work

<sup>149</sup> Cf: Janssen - Pliva case, Opinia prawna dotycząca możliwości dochodzenia przez Narodowy Fundusz Zdrowia roszczeń odszkodowawczych w związku z zabezpieczeniami udzielanymi w sporach sądowych producentów leków innowacyjnych z producentami leków generycznych powodującymi wzrost wydatków po stronie Narodowego Funduszu Zdrowia, Kancelaria Radców Prawnych i Adwokatów Głuchowski Rodziewicz Siemiątkowski Zwara i Partnerzy, Sopot, 19 listopada 2010. [Legal opinion on the National Health Fund's possibility of pursuing claims for damages related to security measures applied in court disputes between innovative drugs producers and generic drugs producers causing a rise in the costs incurred by the National Health Fund] Głuchowski Rodziewicz Siemiątkowski Zwara and Partners Advocates and Legal Advisors, law firm, Sopot, 19 November 2010]

<sup>150</sup> The discounted value for the year 2012 at the inflation rate of 3.6%.



## 4.5. Calculation of costs and benefits - comparison of options

To calculate costs and benefits the following methodological and substantive assumptions have been made:

1. **Only those costs and benefits which differ between the options have been taken into account.** Because of this it should not be assumed that all prospective costs and benefits for each option have been considered.
2. Due to the fact that it is difficult to indicate precise figures related to an anticipated number of patents and development of innovativeness of Polish businesses, **a sensitivity analysis based on scenarios has been introduced.** This is in line with the Guidelines for the Regulatory Impact Assessment of the Ministry of Economy which say that "If specific numbers are not available to describe the regulation cost, we must state the maximum and minimum cost and the most probable, estimated values."<sup>151</sup>
3. An especially relevant circumstance has been taken into account that **even if Poland does not accede to the enhanced cooperation and even if it does not ratify the Agreement on the UPC, Polish businessmen will be able to take advantage of the UEP**, which - we assumed - will be binding then in 24 countries (the EU without Poland, Spain and Italy).
4. A situation when the unitary European patent system is not implemented in any or some of the above-mentioned states has not been considered.
5. It has been assumed that 2014 will be the first year under analysis.
6. First patents with unitary effect will become valid from the year 2018 (it has been assumed that it will take the EPO 4 years to analyze patent applications).
7. It has been assumed that a local division of First Instance of UPC will be established in Poland<sup>152</sup>.

Below are the scenarios applied for the sensitivity analysis:

- A. Optimistic scenario.** It is assumed that Polish businesses will be very innovative; they will develop much faster than they do now, and that the growth rate of patent applications filed by Polish businesses will be much higher than that of the patents filed by foreign businesses. At the same time, the scenario assumes that businesses will be increasingly aware of potential infringements; therefore an increasing number of businesses will be trained in the area of intellectual property protection rights and will peruse available patent databases.
- B. Moderate scenario.** It is assumed that Polish businesses will become increasingly innovative, and develop faster than foreign businesses, but more slowly than in the optimistic scenario. The interest in trainings in the area of intellectual property protection rights will also increase, and more businesses will peruse patent databases.
- C. Pessimistic scenario.** Innovativeness of Polish businesses will increase, though the increase will be slower than in previous scenarios. The rate of filing patent applications by Polish businesses will be slower than today, though it will still be faster than the rate of filing patent applications by foreign entities. It is assumed that businesses' awareness of potential patent infringements will be unchanged as will be the number of businesses which peruse patent databases.

The most probable is **the moderate scenario**, whereas the optimistic and pessimistic scenarios indicate the estimated minimum and maximum regulatory costs.

Below are estimated values of patents depending on an option. These values may be compared with the number of patents granted in previous years.

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<sup>151</sup> Guidelines for Regulation Impact Assessment, Ministry of Economy, 2006, p. 35.

<sup>152</sup> More on methodological assumptions in chapter 4.4.1.

**Table 14. Estimated number of European patents which are valid in Poland<sup>153</sup>**

Year	2014	2016	2018	2020	2023	2033	2043
<b>Option 0 which includes:</b>	<b>45 640</b>	<b>75 139</b>	<b>111 301</b>	<b>153 131</b>	<b>221 694</b>	<b>365 869</b>	<b>428 211</b>
Number of European patents validated in Poland	45 640	75 139	111 301	153 131	221 694	365 869	428 211
<b>Option 1 which includes:</b>	<b>45 640</b>	<b>75 139</b>	<b>160 972</b>	<b>299 589</b>	<b>512 994</b>	<b>897 551</b>	<b>1 049 262</b>
Number of European patents validated in Poland <sup>154</sup>	45 640	75 139	90 086	82 220	63 591	1 670	2 027
Number of UEPs	0	0	70 886	217 369	449 403	895 881	1 047 235

Source: Own work

**Table 15. Estimated numbers of UEPs granted to Polish businessmen and valid in a given year**

Year	2014	2016	2018	2020	2023	2033	2043
Option 0.	0	0	347	457	694	2 977	8 298
Option 1. Optimistic scenario	0	0	422	639	1 236	9 442	37 929
Option 1. Moderate scenario	0	0	347	457	694	2 977	8 298
Option 1. Pessimistic scenario	0	0	316	389	521	1 560	3 279

Source: Own work

**Table 16. Number of European patents granted in the period 2002-2011 divided into states which are granted the highest number of patents**

	2002	2003	2004	2005	2006	2007	2008	2008	2010	2011
Germany	11 246	13 407	13 607	12 487	14 275	11 929	13 496	11 375	12 552	13 583
The United States	11 843	15 090	14 204	13 004	14 833	12 505	12 730	11 347	12 512	13 382
Japan	8 250	10 294	10 441	9 549	12 044	10 651	10 915	9 436	10 587	11 649
France	3 795	4 810	4 364	3 738	4 499	3 980	4 801	4 029	4 540	4 799
Switzerland	1 726	2 400	2 120	1 920	2 216	1 985	2 421	2 221	2 389	2 531
Italy	1 613	2 213	2 219	1 864	2 314	1 966	2 254	1 992	2 286	2 289
Great Britain	2 129	2 668	2 504	2 144	2 241	1 900	1 969	1 647	1 851	1 948
Total	47 380	59 989	58 725	53 255	62 777	54 700	59 801	51 957	58 119	62 112

Source: EPO

The figures in the calculation are based on the data (obtained mainly from the Central Statistical Office

<sup>153</sup> The number of valid patents, not those granted is indicated.

<sup>154</sup> It is assumed that first patents with unitary effect will be granted in 2018. By that time businesses will validate European patents in Poland. Moreover, providing that an average "patent life expectancy" is 10 years, in 2023 all European patents validated in Poland since 2014 will still be valid. Because of that, the numbers of European patents validated in Poland in the first years are higher than in the subsequent years when the majority of businessmen will take advantage of UEP.

[Główny Urząd Statystyczny] and the European Commission, and from the interviews with businessmen), and they include a number of assumptions made according to the best knowledge of the Performer of the analysis. For this reason all of the figures mentioned below are to be viewed as estimates.

Below are benefits the amount of which does not depend on any option (Described in 4.3.2. Analysis of benefits):

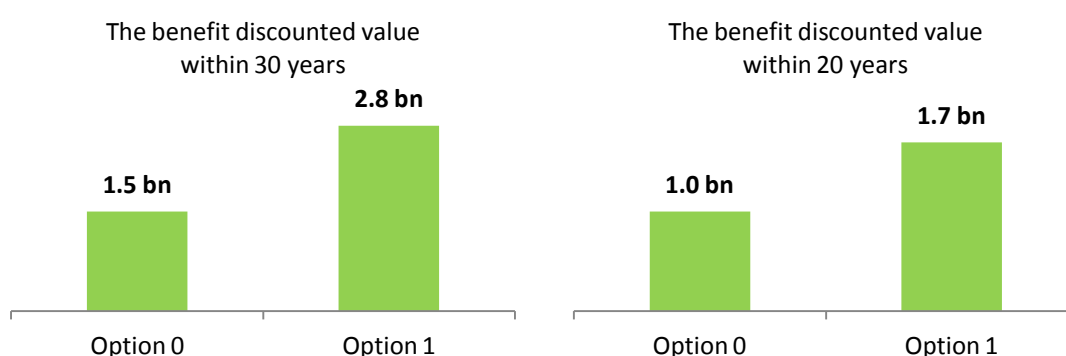
- having monopoly for use of a patented product / solution,
- revenues from licences or from sale of inventions,
- advantage for the image,
- growth of innovativeness,
- possibility of commercializing solutions by RDEs,
- possibility of revoking patents in the EU,
- unification of regulations and interpretations thereof.

The State budget revenues are the benefits the amount of which is different depending on the option. The amount of those benefits for both options is presented below. No differentiation between the scenarios has been made because innovativeness of Polish businesses does not affect the amount of state budget revenues related to the European patents and the UEP.

**Table 17. Discounted value of benefits in case of Option 0 and Option 1 in the first 10 years [mln PLN]**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Option 0	19	22	26	31	35	39	44	48	51	55
Option 1	79	77	81	85	79	81	82	84	85	87

**Chart 5. Discounted value of benefits for Option 0 and Option 1 within 20 and 30 years<sup>155</sup> [PLN]**



The estimated benefits as State budget revenues are higher in Option 1 both in the period of 20 years and 30 years. The estimated difference is to the advantage of Option 1:

- PLN 0.7 billion within 20 years,
- PLN 1.3 billion within 30 years.

The costs which differ depending on the option are as follows:

- costs of court proceedings,

<sup>155</sup> This is a sum of discounted values for each year in a specified period.

- costs of licence purchase,
- costs of patent clearance search,
- costs of adjustment.

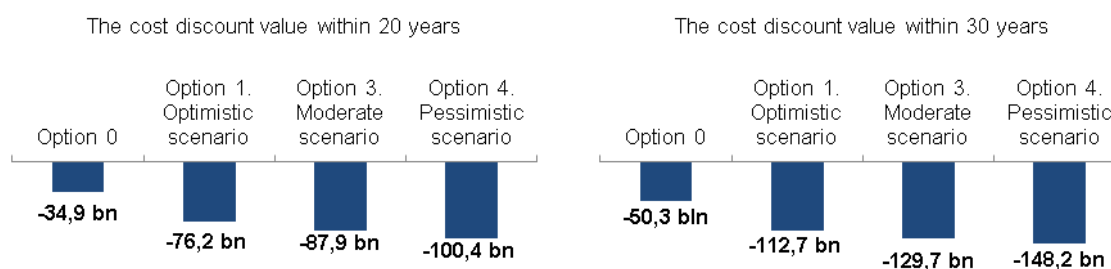
In both Option 0 and Option 1 (the moderate scenario), the highest cost is the licence purchase<sup>156</sup>, which is connected with a growing number of patents which become valid in Poland (89-96% depending on the Option). According to the estimations, an average yearly discounted value of licences purchased by Polish businessmen will amount to approximately PLN 1.6 billion in Option 0 and approximately PLN 3.9 billion in Option 1<sup>157</sup>. Another important category of costs are the costs of court proceedings, which amount to approximately 4% of the costs in Option 0 and approximately 8% of the costs in Option 1. The costs of patent clearance search constitute over 0.2% of all costs in Option 0 and approximately 2% in Option 1. The lowest costs are the adjustment costs related to trainings of businessmen in connection with new regulations (both Option 0 and Option 1), and to the creation of First Instance of UPC in Poland (Option 1).

The amounts of those costs in the two options are presented below. We also introduced a differentiation between the scenarios of development of innovativeness of Polish businesses.

**Table 18. The discounted value of costs for Option 0 and Option 1 for the first 10 years [mln PLN]**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Option 0	1 028	1 142	1 230	1 480	1 600	1 730	1 822	1 917	1 963	2 010
Option 1. Optimistic scenario	1 043	1 163	1 316	1 499	4 422	4 462	4 497	4 527	4 551	4 571
Option 1. Moderate scenario	1 039	1 154	1 311	1 493	5 318	5 330	5 337	5 341	5 341	5 337
Option 1. Pessimistic scenario	1 037	1 150	1 309	1 490	6 236	6 226	6 213	6 196	6 177	6 154

**Chart 6. Discounted value of costs for Option 0 and Option 1 within 20 and 30 years<sup>158</sup> [PLN]**



<sup>156</sup> For calculation purposes, the purchase of a licence is equivalent to other possible options related to patent infringement claims. e.g., closing down a business against which such claims are raised or performing additional activities enabling an effective avoidance of claims related to patent infringement.

<sup>157</sup> By comparison, in 2011 the value of services purchased by Polish businesses related to use of intangible, non-manufactured and not-financial assets and rights of ownership amounted to PLN 6.8 billion (data from the "Foreign Commerce Statistical Yearbook 2011", CSO, p. 222)

<sup>158</sup> This is a sum of discounted values for each year in a specified period.

The estimated costs of court proceedings, purchase of licences, patent clearance searches and adjustment are higher in Option 1, both within 20 and 30 years. Resignation from Option 0 and implementation of Option 1<sup>159</sup> will render the estimated costs for the economy higher by:

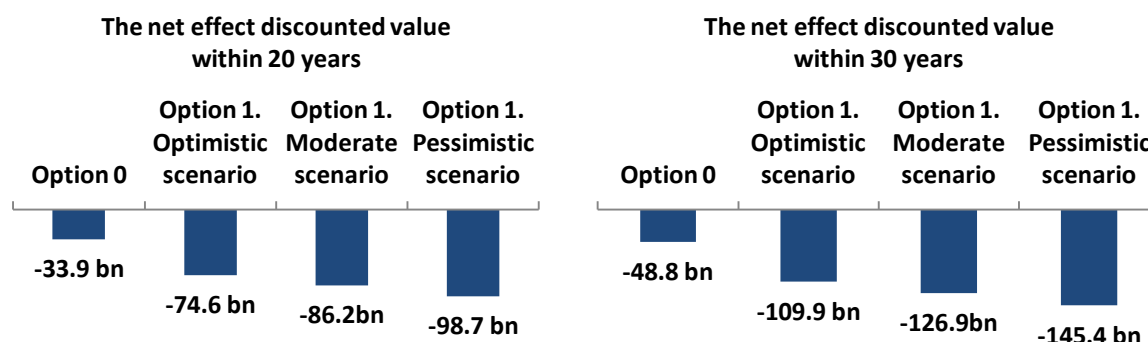
- PLN 53.0 billion within 20 years,
- PLN 79.4 billion within 30 years.

The consequences of choosing an option should be determined by the net effect which is a result of subtracting costs from benefits. The outcome of the comparison of benefits and costs which differ between the options is presented in the table and chart below.

**Table19. The net effect discounted value for Option 0 and Option 1 in the first 10 years [mln PLN]**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Option 0	-1 009	-1 120	-1 273	-1 449	-1 565	-1 691	-1 778	-1 870	-1 912	-1 955
Option 1. Optimistic scenario	-964	-1 086	-1 235	-1 414	-4 343	-4 381	-4 414	-4 443	-4 466	-4 485
Option 1. Moderate scenario	-960	-1 076	-1 230	-1 408	-5 239	-5 249	-5 255	-5 257	-5 255	-5 250
Option 1. Pessimistic scenario	-958	-1 073	-1 228	-1 406	-6 156	-6 145	-6 130	-6 112	-6 092	-6 068

**Chart 7. Net effect discounted value for Option 0 and Option 1 within 20 and 30 years<sup>160</sup> [PLN]**



<sup>159</sup> Comparison with values of moderate scenario, which is the most likely one.

<sup>160</sup> This is a sum of discounted values for each year in a specified period.

The estimated net effect will be more beneficial in case of Option 0. Resignation from Option 0 and implementation of Option 1 will lead to the following estimated additional costs for the economy:

- PLN 52.3 billion within 20 years,
- PLN 78.1 billion within 30 years.

Taking into account only those benefits and costs which differ between the options and the fact that even if Poland does not implement the unitary patent and does not ratify the Agreement on a Unified Patent Court, Polish businessmen will be able to take advantage of a European patent with a unitary effect, which - we assume - will then be in force in 24 EU states (UE except for Poland, Spain and Italy), **according to the estimations, Option 0 is a more beneficial option (non-implementation of a unitary patent in Poland and non-accession to the Agreement on a Unified Patent Court)**, irrespective of a temporal perspective or a scenario of the development of innovativeness of Polish businesses.

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# Annex 1. Case studies

Below are three case studies related to real situations of businessmen and presented during interviews. Because the interviews with businessmen were anonymous, business names of the entities to which the presented situations correspond are not given.

## Small production business

A small business from the production sector fears the implementation of the unitary system of patent protection. The business has never verified patent databases because its activity relies on a traditional method of production. The company indicated the main sources of its concern, which are as follows:

- increased costs of operation on the market,
- more liberal rules of approval of applications for patentable inventions applied by the EPO as compared to the Patent Office.

The small business has received cease and desist letters from a big international company operating in the same sector. The letters addressed the issues of alleged infringements of rights derived from European patents, which, as it turned out, were not validated in Poland. Because the employees lacked knowledge in the area of the patent system, they decided to check to what extent the letters were justifiable. The management board got concerned about the content of the letters, but decided not to introduce any changes into the technology of production assuming that the technology they employed was commonly known; therefore it was not possible for anybody to have been granted rights of protection for that technology.

Moreover, the business turned to a patent attorney for assistance. The costs of patent clearance search and translation of patent description and claims for several European patents indicated in the letter amounted to PLN 10 000. The patent attorney confirmed that the patent to which the big company claimed rights was invalid in Poland. At the same time the representatives of that international company arrived at the seat of the business and suggested that they could grant a licence, and that the licence fee would amount to 3-5% of the entire turnover of that company (the business operates at the level of 8-10% of profitability), therefore, one half of the profits would have to be returned to the international company). Moreover, the management board concluded that the patents granted by the EPO relate to the inventions which would not meet the novelty and inventive step requirement in case of applying for a right of protection under a patent in the national Patent Office. The business fears, however, that if Poland accedes to the UEP, the cases like those would materialize next time and substantially increase the costs related to e.g. a necessity to purchase a licence.

## Small business from environmental sector

A small business from the environmental sector developed an innovative technology. The technology is novel not only in Poland but also worldwide. The business would like to generate high profits from the sale of this technology in Poland and abroad. It has already established business contacts in Europe and Asia. It also considers a possibility to apply for a patent for this solution. Despite the fact that the expected profits from marketing a new technology are high, the business has not decided yet whether to file a patent application with the EPO. The owner would prefer to take advantage of the unitary patent protection system due to lower costs. A potentially granted patent would improve public image of the business and make the business more credible in the eyes of business partners and enable taking larger loans.

Despite the fact that the environmental sector abounds in new patents granted each year, the management board does not feel threatened. In its view, in this sector patents do not serve to run patent wars. Patented inventions are not completely new solutions, they are more of improvements of the already existing ones, but thanks to them it is possible to reduce costs related to the use of technology.

A representative of the business expects that thanks to being granted a patent with unitary effect, the business would be able double its the turnover within five years. Another considered option is the protection of the developed technology by non-disclosing (know-how). A final decision has not been made yet. In the opinion of the business representative, operating in the global market is inevitable if the strategy of the business is to



develop expansively. The English is also not a problem because the majority of patents which are crucial for this business are in English. For those reasons the business awaits the possibility of obtaining UEP<sup>161</sup>.

### Big business from energy sector

Implementation of the unitary patent protection system for a big business from the energy sector which operates exclusively in the national market is related to the increase of current costs of operation. Presently the business holds national patents. The energy sector is characterised by high density of protection rights which are currently in force. One employee is responsible for regular monitoring of patent applications. The monitoring involves learning about titles of applications and abstracts of patent descriptions. If the business wishes to make new investments, complete patent descriptions and claims are meticulously verified. A thorough analysis of one patent takes from several hours to a dozen days, sometimes it is necessary to commission translation services to translators specialising in a specific area.

Because of introduction of the patent with unitary effect the costs of patent clearance searches will increase. One of the employees thinks that the number of new documents which will require verification from the perspective of patent clearance each year may amount to approximately 20 000 items. After preliminary examination of the documents, approximately 5% of them will require comprehensive examination. The cost of the search will not only include the cost of translation - in total approximately PLN 200 000 per year - but also a necessity to employ more staff responsible for patent clearance searches. For those reasons, the business is against Poland acceding to the system of European patent with unitary effect.

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<sup>161</sup> It was already indicated in this analysis that Polish businesses will be able to be granted UEP if Poland implements the UEP system (Option 1), and if Poland does not implement it (Option 0).

# Annex 2.Used methods of data collection

## Desk research

Desk research analysis included both Polish and foreign studies. Also publications containing statistical data were taken into account. Below is a list of analysed publications divided into bibliography, secondary sources of statistical data and legislative acts.

### Bibliography

- Baczko Tadeusz (ed.), Raport o innowacyjności gospodarki Polski w 2010 roku, Instytut Nauk Ekonomicznych Polskiej Akademii Nauk, 2011 ["The report on the innovativeness of the Polish economy in 2010"], the Institute of Economic Science of the Polish Academy of Sciences, 2011
- Breitzman Anthony, Hicks Diana, An Analysis of Small Business Patents by Industry and Firm Size, SBA-Office of Advocacy, 2008
- Brussa Anna, Tarnawa Anna (eds.), Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce. 2011, Polska Agencja Rozwoju Przedsiębiorczości, 2011 ["The report on the status of the sector of small and medium-sized enterprises in Poland in 2011"], the Polish Agency for Enterprise Development, 2011
- Case Law of the Boards of Appeal of the European Patent Office - sixth edition, Legal Research Service for the Boards of Appeal, European Patent Office , 2010
- Danguy Jérôme, van Pottelberghe de la Potterie Bruno, Economic cost-benefit analysis of the community patent, EC DG International Market, 2009
- Daszkiewicz Marek, Jednostki badawczo-rozwojowe jako źródło innowacyjności w gospodarce pomoc dla małych i średnich przedsiębiorstw, Polska Agencja Rozwoju Przedsiębiorczości, 2008 ["Research and development entities as the source of innovativeness in the economy, assistance to small and medium-sized businesses"], the Polish Agency for Enterprise Development, 2008
- Europejski pakiet patentowy - same straty, brak korzyści. Raport Instytutu Badań nad Gospodarką Rynkową, Polski Związek Pracodawców Przemysłu Farmaceutycznego, 2012 ["The European patent package – all losses, no benefits. Report of the Institute for Market Economics"], The Polish Society of Employers in Pharmaceutical Industry, 2012
- Gambardella Alfonso, How are patents "used" in Europe? (... and elsewhere?), Bocconi University
- Gambardella Alfonso, Giuri Paola, Mariani Myriam, Study on evaluation the knowledge economy what are patents actually worth? The value of patents for today's economy and society, European Commission, 2006
- Gambardella Alfonso, Giuri Paola, Mariani Myriam, The Value of European Patents - Evidence from a survey of European Investors (Final Report), 2005
- Harhoff Dietmar, Economic Cost-Benefit Analysis of a Unified and Integrated European Patent Litigation System, Ludwig-Maximilians-Universität München, 2009
- Harhoff Dietmar, Hall Bronwyn H., von Graevenitz Georg, Hoisl Karin, Wagner Stefan, Gambardella Alfonso, Giuri Paola, The strategic use of patents and its implications for enterprise and competition policies, 2007
- Hisamitsu Arai, Intellectual Property Policies for the Twenty-First Century: The Japanese Experience in Wealth Creation, World Intellectual Property Organization, 2000
- Hoisl Karin, Harhoff Dietmar van Pottelsberghe de la Potterie Bruno, Reichl Bettina, Patent validation at the country level - the role of fees and translation costs, 25th Celebration Conference on entrepreneurship and innovation - organizations, institutions, systems and regions, Copenhagen, CBS, Denmark, 2008
- „Jednolita ochrona patentowa” w UE zagraża rozwojowi polskiej gospodarki opartej na wiedzy, Polski Związek Pracodawców Przemysłu Farmaceutycznego, 2012 ["The unitary patent protection in the EU threatens

- development of the Polish knowledge-based economy"], The Polish Society of Employers in Pharmaceutical Industry, 2012]
- Leśniewski Łukasz, Sektor badawczo-rozwojowy w Polsce, Polska Agencja Informacji i Inwestycji Zagranicznych S.A., 2010 ["The research and development sector in Poland"], the Polish Information and Foreign Investment Agency
- Łazewski Marek, Analiza aspektów gospodarczych, społecznych i prawnych, dotycząca patentu jednolitego i ewentualnych możliwości związanych z wdrożeniem przepisów o patencie jednolitym, Ministerstwo Gospodarki, 2008 ["The analysis of economic, social and legal aspects concerning the unitary patent and potential opportunities related to the implementation of the regulations on the unitary patent"], the Ministry of Economy, 2008
- Łobejko Stanisław, Stan i tendencje rozwojowe sektora jednostek badawczo-rozwojowych w Polsce, Polska Agencja Rozwoju Przedsiębiorczości, 2008 ["Status and tendencies for development in the sector of research and development entities in Poland"], the Polish Agency for Enterprise Development, 2008
- Matusiak Krzysztof B., Guliński Jacek (eds.), Rekomendacje zmian w polskim systemie transferu technologii i komercjalizacji wiedzy, Polska Agencja Rozwoju Przedsiębiorczości, 2010 ["Recommendations for changes in the Polish system of the technologies transfer and knowledge commercialization"], the Polish Agency for Enterprise Development, 2010
- Nowicka Aurelia, Jednolita ochrona patentowa i Jednolity sąd patentowy - uwagi krytyczne, Uniwersytet im. Adama Mickiewicza w Poznaniu, 2012 ["The Unitary Patent Protection and the Unified Patent Court - Critical Comments"] Adam Mickiewicz University in Poznań, 2012
- Nowicka Aurelia, Jednolita Ochrona Patentowa i Jednolity Sąd Patentowy - Uwagi Krytyczne (stan na 27 czerwca 2012 r.) (uzupełnienie: 5 lipca 2012 r.), Rzecznik Patentowy 2-4 (69-71), 2011 ["The Unitary Patent Protection and the Unified Patent Court - Critical Comments."] (as of 27 June 2012) (supplementation: 5 July 2012) Rzecznik Patentowy [The Patent Attorney] 2-4 (69-71, 2011)
- Opinia prawna dotycząca możliwości dochodzenia przez Narodowy Fundusz Zdrowia roszczeń odszkodowawczych w związku z zabezpieczeniami udzielanymi w sporach sądowych producentów leków innowacyjnych z producentami leków generycznych powodującymi wzrost wydatków po stronie Narodowego Funduszu Zdrowia, Głuchowski Rodziewicz Siemiątkowski Zwara i Partnerzy Kancelaria Radców Prawnych i Adwokatów, 2011 ["Legal opinion on the National Health Fund's possibility of pursuing claims for damages related to security measures applied in court disputes between innovative drugs producers and generic drugs producers causing a rise in the costs incurred by the National Health Fund"] Głuchowski Rodziewicz Siemiątkowski Zwara and Partners Advocates and Legal Advisors law firm, 2011
- Patent Litigation Insurance - A study of the European Commission on the feasibility of possible insurance schemes against patent litigation risks, CJA Consultants Ltd, 2006
- Podszywałow Andrzej, Wycena patentu w warunkach wysokiego ryzyka na wczesnym etapie procesu komercjalizacji, Uniwersytet Jagielloński, Collegium Novum, 2008 ["Valuation of a patent under the conditions of high risk at an initial stage of commercialization process"] Jagiellonian University, Collegium Novum, 2008
- Preliminary Findings of DG Internal Market and Services - Study on the Caseload and Financing of the Unified Patent Court, 2011
- Pyrża Andrzej (ed.), Poradnik wynalazcy - Procedury zgłoszeniowe w systemie Krajowym, Europejskim, Międzynarodowym, Krajowa Izba Gospodarcza oraz Urząd Patentowy Rzeczypospolitej Polskiej, 2009 ["The Inventor's Guide – Application procedures under National, European and International system"] the National Chamber of Commerce and the Polish Patent Office, 2009
- Raport nt. barier komercjalizacji wyników badań naukowych w dziedzinie Life Science w Małopolsce, Jagiellońskie Centrum Innowacji Sp. z o.o., 2007 ["Report on the barriers of commercializing of the scientific research results in the area of Life Science in Małopolska"], the Jagiellonian Center for Innovations Sp, z o.o., 2007
- Rynek leków a ochrona własności intelektualnej, Polski Związek Pracodawców Przemysłu Farmaceutycznego, 2009 ["The drug market and the intellectual property protection"], The Polish Society of Employers in Pharmaceutical Industry, 2009
- Scenarios for the Future, European Patent Office, 2007
- Schankerman Mark, How Valuable is Patent Protection? Estimates by Technology Field, The RAND Journal of Economics, 1998
- Sprzeciw polskich naukowców, przedsiębiorców i pracowników wobec niekorzystnych dla polskiej gospodarki

- ustaleń o wzmocnionej współpracy w zakresie patentów, Polski Związek Pracodawców Przemysłu Farmaceutycznego, 2011 ["An opposition of the Polish scientists, entrepreneurs and employees to disadvantageous arrangements concerning the enhanced cooperation in the area of patent for the Polish economy"] The Polish Society of Employers in Pharmaceutical Industry, 2011
- Stanowisko Pracodawców Rzeczypospolitej Polskiej wobec propozycji przystąpienia Polski do systemu jednolitej ochrony patentowej ["Standing of the Polish Employers with regard to a proposal for accession of Poland to the system of unitary patent protection"]
- Szczepanowska-Kozłowska Krystyna, Łągowska Joanna, Analiza aspektów prawnych, społecznych i gospodarczych protokołu londyńskiego odnoszącego się do patentu europejskiego w kontekście ewentualnego przystąpienia polski do protokołu w związku z wejściem wymienionego protokołu w życie w stosunku do niektórych państw członkowskich europejskiej organizacji patentowej, Ministerstwo Gospodarki, 2008 [The analysis of legal, social and economic aspects of the London protocol related to the European patent in the context of potential accession of Poland to the mentioned protocol in connection with this protocol entering into force with regard to some Member States of the European Patent Organization"], the Ministry of Economy, 2008
- Szczepanowska-Kozłowska Krystyna, Korzyści, szanse i zagrożenia wynikające z jednolitego systemu ochrony patentowej dla jednostek naukowych, Ministerstwo Nauki i Szkolnictwa Wyższego, 2012 ["Benefits, opportunities and threats resulting from the system of unitary patent protection for scientific entities"], the Ministry of Science and Higher Education, 2012
- Tamowicz Piotr, Licencja jako droga poprawy innowacyjności i konkurencyjności polskich przedsiębiorstw. Analiza stanu istniejącego oraz istniejące bariery, Ministerstwo Gospodarki, Gdańsk 2006 ["Licence - a way to improve innovativeness and competitiveness of businesses. Anaysis of the existing state and the existing barriers"], the Ministry of Economy, Gdańsk 2006
- Varhelyi Oliver, Study on the Financing of the UPC, European Commission Internal Market & Services DG, 2011
- van Pottelsberghe Bruno, Economic Perspectives on the unitary patent protection in Europe, EU Parliament, 2011
- Wrześniak Grzegorz, Optymalna polityka patentowa a innowacyjność, Krakowska Konferencja Młodych Uczonych, 2008 ["Optimum patent policy and innovativeness"], The Cracow Conference of Young Scientist, 2008
- Wyniki badań polskich firm-eksporterów zaawansowanych technologii. Projekt zlecony przez Ministerstwo Spraw Zagranicznych, 2010 ["Results of the research of Polish businesses exporting advanced technologies. Project commissioned by the Ministry of Foreign Affairs"], 2010
- Wytyczne do Oceny Skutków Regulacji, Ministerstwo Gospodarki, 2006 ["Guidelines for the Regulation Impact Assessment"], the Ministry of Economy, 2006
- Zadura-Lichota Paulina (eds.), Innowacyjność 2010, Polska Agencja Rozwoju Przedsiębiorczości, 2010 ["Innovativeness 2010"], the Polish Agency for Enterprise Development, 2010
- Żołnierski Aleksander, Innowacyjność polskich mikroprzedsiębiorstw, Polska Agencja Rozwoju Przedsiębiorczości, 2005 ["Innovativeness of Polish micro-businesses,"] the Polish Agency for Enterprise Development, 2005

## Secondary sources of statistical data

World Bank data: World Development Indicators

OECD data: International technology flows (royalties and license fees), Patenting firms licensing out at least one patent to non-affiliated companies, Foreign inventions owned by countries

WIPO data: Resident patent filings per \$billion Gross Domestic Product, Number of resident patent filings per million population, Number of Resident Patent Filings per \$Million Research & Development (R&D) Expenditure

Reports of the Central Statistical Office "Działalność innowacyjna przedsiębiorstw przemysłowych w latach 2005-2007" ["Innovative activity of businesses in the years 2005-2007"], "Działalność innowacyjna przedsiębiorstw w latach 2006-2009" ["Innovative activity of businesses in the years 2006-2009"], "Działalność innowacyjna przedsiębiorstw w latach 2008-2010", ["Innovative activity of businesses in the years"], "Rocznik statystyczny handlu zagranicznego 2011" ["Statistical Yearbook of foreign trade 2011"], "Bilansowe wyniki finansowe podmiotów gospodarczych za 2010 r." ["Balance financial results of businesses per 2010"], "Przychody, koszty i wyniki finansowe według liczby pracujących w 2010 roku", ["Revenue, costs and financial results according to the number of working persons in 2010"], "Podmioty gospodarki narodowej (bez osób fizycznych prowadzących wyłącznie indywidualne

gospodarstwa rolne) według przewidywanej liczby pracujących oraz sekcji i działów Polskiej Klasyfikacji Działalności (PKD)” [“National Economy entities (without natural persons conducting individual agricultural holdings) according to an estimated number of working persons and sections and subsections of the Polish Classification of Activity)]]”

The annual report of the European Patent Office 2011

The annual reports of the Polish Patent Office (2003-2011)

The European Patent Office website: <http://www.epo.org/about-us/statistics.html> including data: Total European patent filings, European patent applications by field of technology, Total European granted patents by the EPO, Granted patents by field of technology, European patent applications filed - leaders in leading fields

### **The analysed legislative acts**

Commission Staff Working Paper Impact Assessment Accompanying document to the Proposal for a Regulation Of The European Parliament And The Council implementing enhanced cooperation in the area of the creation of unitary patent protection and Proposal for a Council Regulation implementing enhanced cooperation in the area of the creation of unitary patent protection with regard to the applicable translation arrangements, {COM(2011) 215}, {COM(2011) 216}, {SEC(2011) 483} Brussels, SEC(2011) 482/2

The Convention on the Grant of European Patents of 5 October 1973 drafted in Munich, amended by the act amending article 63 of the Convention of 17 December 1991, and amending decisions of the Administrative Council of the European Patent Convention of 21 December 1978, 13 December 1994, 20 October 1995 , 5 December 1996 and 10 December 1998 together with the protocols constituting an integral part thereof (Dz. U. [Official Journal] of 26 April 2004)

Proposal for the Council Regulation implementing enhanced cooperation in the area of the creation of unitary patent in relation to applicable translation arrangements, The Council of the European Union. 2011/0094 (CNS)

Proposal for the Regulation of the European Parliament and the Council implementing enhanced cooperation in the area of the creation of unitary patent protection, the European Parliament, 2011/0093 (COD)

Draft Agreement on a Unified Patent Court together with a draft statute, a working document of 10 November 2011, no. 1674/11, English version

Draft Agreement on a Unified Patent Court together with a draft statute, a working document of July 2011, English version

Regulation of the Minister of Justice of 2 December 2003 on fees for patent attorneys' activities (Dz.U. [Official Journal] no. 212, item. 2076 as amended)

Regulation of the Council of Ministers of 26 February 2008 amending the regulation on fees related to the protection of inventions, utility models, industrial designs, trademarks, geographical indications and topographies of integrated circuits (Dz.U. [Official Journal] no. 41 item. 241)

Council Regulation (EC) no. 44/2001 of 22 December 2000 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters

Ancillary Regulations of the Unified Patent Court of 30 March 2012, Polish and English versions

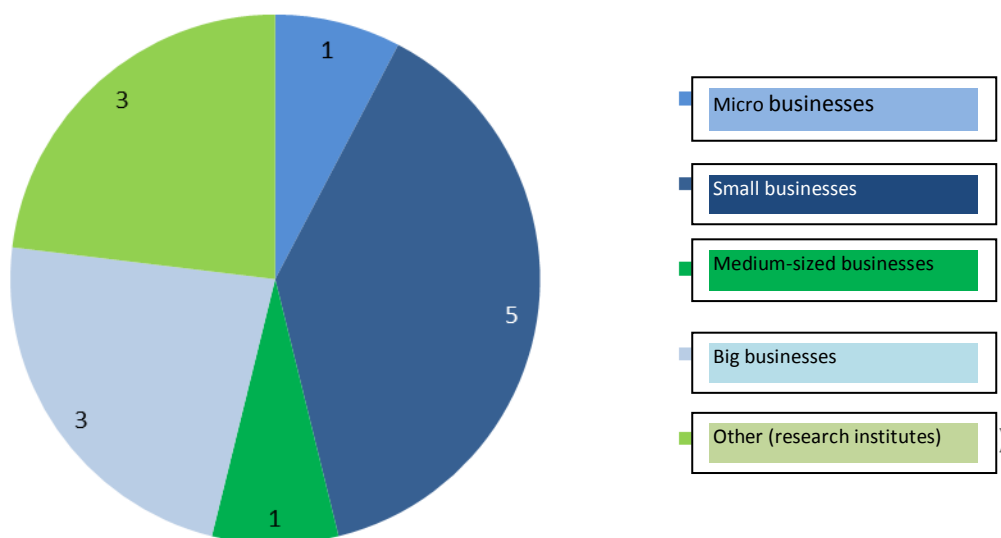
Act of 4 March 2003 on filing European patent applications and the effects of the European patent in Poland, (Dz. U. [Official Journal] no. 65 item 598)

Act of 11 April 2001 on Patent Attorneys, (Dz. U. [Official Journal] no. 49, item 509)

Act of 30 June 2000 Industrial Property Law (consolidated text: Dz. U. [Official Journal] of 2003 no. 119, item 1117) as amended.

## Electronic questionnaires

Electronic questionnaires were filled in by representatives of innovative businesses which are members of the Polish Chamber of Commerce for High Technology and by the GreenEvo competition laureates. The questionnaires were filled by 13 entities. The structure of the entities which filled in the questionnaires is presented in the chart below.



**Chart 8. Entities participating in electronic questionnaires**

The businesses represent different industries, i.a. medical and cosmetic industries, technology for the protection of the environment, electronic and veterinary industry, dietary supplements and electrotechnology.

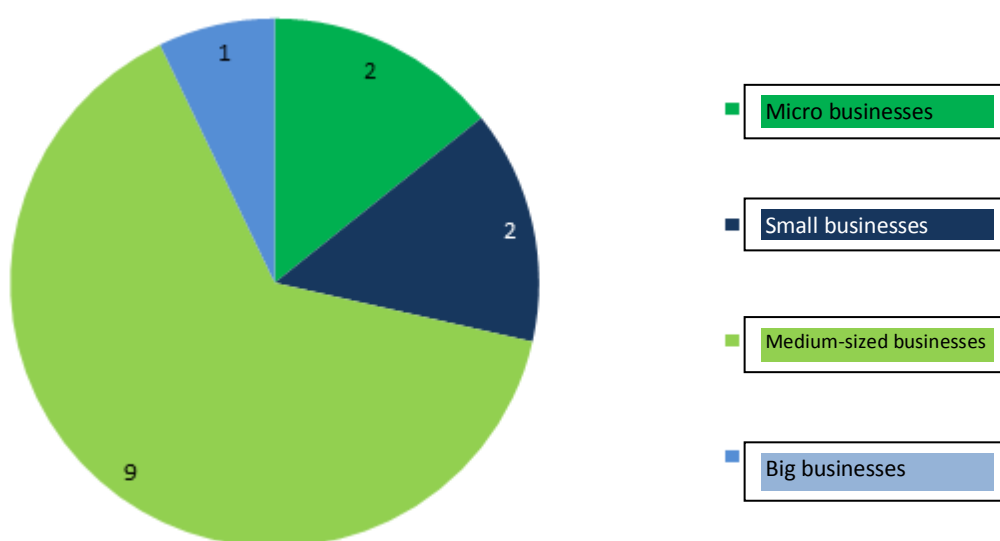
The results obtained from the questionnaires indicate that 85% of the respondents already have knowledge about patent protection rights under the European patent with unitary effect. At the same time one half of the respondents believe that implementation of this solution in Poland will adversely affect development of SMEs and their businesses. The entities fear competition on the part of big businesses and European institutions. 23% of the respondents (1 business and 2 research institutes) indicated that the unitary European patent is a beneficial solution which concurrently ensures lower costs related to obtaining and protection of the solutions developed by them in the entire European market.

## CATI interviews

In CATI interviews we contacted 34 randomly chosen business which have been on the list of entities which filed patent applications with the Polish Patent Office.

Ultimately, the telephone interviews were completed by 14 businessmen mainly from the machinery and equipment industry, food industry, and pharmaceutical, electric and electronic industries. The structure of the entities which participated in CATI interviews is presented in the chart below.

**Chart 9 Entities participating in CAT interviews**



The results obtained from the questionnaires show that 50% of the business have knowledge about patent protection rights derived from the European patent with unitary effect. Concurrently, 79% of the businesses, because of the business profile, is presently forced to monitor new patents valid in Poland and in the EU.

All businesses which have knowledge about the UEP have concluded that the implementation of this solution in Poland will not positively influence SMEs and their own businesses. 88% of the businesses voiced their concern about the precision of patent translations based on the automatic translations database.

36% of the respondents have experienced dishonest practices of big companies regarding protection of patent rights, which may be a reason for their negative assessment of the possibility of implementing the European patent with unitary effect in Poland.

## IDI interviews

Individual in-depth interviews were conducted with the following entities:

1. Businesses.
2. Patent attorneys.
3. Organizations:
  - PKPP Lewiatan,
  - Business Center Club,
  - Polish Chamber of Patent Attorneys,
  - "ORGMASZ" Institute for Organization and Management in Industry,
  - Polish Association of Lighting Industry,
  - Polish Chamber of Commerce
4. Representatives of Science:
  - Professor Aurelia Nowicka, expert in the intellectual property law from Adam Mickiewicz University in Poznań,
  - Professor Krystyna Szczepanowska-Kozłowska, Law and Administration Faculty at Warsaw University, head of the Intellectual Property and Intangible Property Department,
5. Public institutions representatives:
  - Representative of the Ministry of Science and Higher Education,
  - Representatives of the Ministry of Environment,
  - Representatives of the Polish Patent Office.

The opinions from businessmen, patent attorneys and organizations indicate a negative or distanced position with regard to the proposed solution. The only exception was one businessman who expressed positive views on the European patent with unitary effect. Views of scientists vary. The representatives of the ministries expect a positive outcome after the UEP is introduced, the Polish Patent Office, in turn, did not express its view in this regard, but cited statistical data only and discussed the patent granting procedure in Poland.



### Panel of experts

The meeting with the panel of experts took place on 13 September 2012 in the seat of the Institute for Organization and Management in Industry „ORGMA SZ”. The panel of independent experts was organized by the Institute for Organization and Management in Industry in cooperation with Deloitte. The meeting was aimed to supplement and enrich knowledge acquired by means of other tools of research by obtaining information about opinions, reflections and explanations of specialists.

The meeting brought together representatives of research units, associations of businessmen, lawyers and representatives of the Ministry of Economy.

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