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THE EUROPEAN UNION**

**Brussels, 2 July 2010**

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**COVER NOTE**

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from: Secretary-General of the European Commission,  
signed by Mr Jordi AYET PUIGARNAU, Director

date of receipt: 2 July 2010

to: Mr Pierre de BOISSIEU, Secretary-General of the Council of the European  
Union

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Subject: Commission staff working document: Impact Assessment accompanying  
document to the Proposal for a Council Regulation on the translation  
arrangements for the European Union patent

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Delegations will find attached Commission document SEC(2010) 796.

Encl.: SEC(2010) 796



EUROPEAN COMMISSION

Brussels, 30.6.2010  
SEC(2010) 796

**COMMISSION STAFF WORKING DOCUMENT**

**IMPACT ASSESSMENT**

*Accompanying document to the*

Proposal for a

**COUNCIL REGULATION**

**on the translation arrangements for the European Union patent**

{COM(2010) 350 final}  
{SEC(2010) 797}

## ***Disclaimer***

*This impact assessment report commits only the Commission's services involved in its preparation. The report has been prepared as a basis for comment and does not prejudice the final form of any decision to be taken by the Commission.*

### **1. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES**

#### **1.1. Organisation and timing**

The Commission's initial proposal for a Council Regulation on the Community patent was presented on 1 August 2000, on the basis of Article 308 EC. It covered all elements for the creation of a single EU-wide patent, including translation arrangements<sup>1</sup>.

The entry into force of the Lisbon Treaty on 1 December 2009 has resulted in a change of the legal basis for the proposal for the Regulation on the Community patent (now EU patent):

- in accordance with the first subparagraph of Article 118 TFEU, measures for the creation of European intellectual property rights are to be established by the European Parliament and the Council acting under the ordinary legislative procedure;
- in accordance with the second subparagraph of Article 118 TFEU, the language arrangements for European intellectual property rights are to be established under a special legislative procedure by the Council acting unanimously after consulting the European Parliament. It follows that the translation arrangements for the future EU patent must be established by a separate regulation subject to a different legislative procedure.

On 4 December 2009, the Council adopted conclusions on the Enhanced patent system in Europe<sup>2</sup>. The conclusions (§36) state that "The EU patent Regulation should be accompanied by a separate regulation, which should govern the translation arrangements for the EU patent adopted by the Council with unanimity in accordance with the second subparagraph of Article 118 TFEU. The EU patent Regulation should come into force together with the separate regulation on the translation arrangements for the EU patent." On this basis, the Commission is presenting a proposal for a Council Regulation on the translation arrangements for the EU patent.

#### **1.2. Internal consultations**

The Impact Assessment was monitored by an Inter-Services Steering Group. The last meeting of the Steering Group was convened on 25 March 2010.

A draft of this Impact Assessment Report was submitted to the Impact Assessment Board on 29 March 2010. The Board met on 14 April 2010. In its opinion dated 16 April 2010, the Board found that the report provided the necessary evidence base for action in the area, but suggested further improvements in the analysis on a number of issues.

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<sup>1</sup> Proposal for a Council Regulation on the Community patent - COM(2000) 412.

<sup>2</sup> Council Document 17229/09, Annex: Council conclusions on an enhanced patent system, adopted in 2982nd Council meeting - Competitiveness (Internal market, Industry and Research); Brussels, 4 December 2009.

The IA Board recommended that the current context and problem definition should be strengthened in order to facilitate the analysis of the impacts, political feasibility and subsidiarity of the proposed options. It also recommended strengthening analysis of the change in costs across different options and distinguishing more clearly between the economic factors and political constraints. The IA Board proposed that aggregate cost estimates at the EU level are provided for each option and as compared to the baseline scenario. A more extensive analysis of the problem drivers, including, for example, a more detailed explanation on a low validation rate, was also recommended.

All of the above comments from the IA Board have been taken into account in revising the impact assessment. On the basis of the revised economic analysis, Option 2 has been identified as the preferred one for the legislative proposal.

### 1.3. Consultation of interested parties

The views of interested parties concerning the translation arrangements for the EU patent have been heard on several previous occasions.

In January 2006, the Commission launched a broad consultation on the future patent policy in Europe<sup>3</sup>. More than 2500 replies were received from a variety of stakeholders, including businesses in all sectors of the economy, industry associations, SME associations, patent practitioners, public authorities and academics. The replies clearly showed stakeholders' disappointment with the lack of progress with the Community patent project. In particular, sharp criticism was voiced against the translation arrangements included in the Council's common political approach of 3 March 2003, which laid down that the patent proprietor would have to supply a translation of the *claims* into *all official Community languages*<sup>4</sup>. Nearly all stakeholders rejected this solution as being unsatisfactory: criticisms focused on the high costs and practical difficulties for patent proprietors as well as the legal uncertainty for all users of the patent system. The support for other options varied substantially; some stakeholders requested an English-only regime, while others preferred various multilingual arrangements.

Despite the above criticisms, stakeholders also expressed continued support for the concept of a "unitary, *affordable* and competitive" Community patent. This message was repeated at a public hearing held on 12 July 2006, where a large variety of stakeholders again stated their support for the creation of a Community patent – but not "*at any price*". SME representatives in particular confirmed that the translation arrangements in the common political approach would be far too costly for them<sup>5</sup>.

On the basis of the stakeholder consultation, the Commission adopted the Communication "Enhancing the patent system in Europe" in April 2007<sup>6</sup> which outlined the way forward as envisaged by the Commission, including the creation of the Community patent and possible solutions for the translation arrangements.

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<sup>3</sup> The consultation document, replies from stakeholders and a report on the preliminary findings of the consultation are available at [http://ec.europa.eu/internal\\_market/indprop/patent/consultation\\_en.htm](http://ec.europa.eu/internal_market/indprop/patent/consultation_en.htm).

<sup>4</sup> Council Document 6874/03, 2490<sup>th</sup> Council meeting - Competitiveness (Internal market, Industry and Research), Brussels, 3 March 2003.

<sup>5</sup> [http://ec.europa.eu/internal\\_market/indprop/docs/patent/hearing/report\\_en.pdf](http://ec.europa.eu/internal_market/indprop/docs/patent/hearing/report_en.pdf).

<sup>6</sup> Communication from the Commission to the European Parliament and the Council - COM(2007) 165, 3.4.2007.

Discussions with stakeholders continued on the basis of this Communication throughout 2008. On 16-17 October 2008, the Commission jointly with the French Presidency of the Council organised a conference on Industrial Property Rights in Europe<sup>7</sup>. One of the major issues discussed were the possible translation arrangements for the future EU patent. Participants reiterated in particular that the EU patent "should be cost-effective, legally secure and reduce complexity", and expressed broad support for new initiatives aiming at developing specialised machine translation programmes for patent documents<sup>8</sup>.

On 14 October 2008, a "European Parliament of Enterprises" (meeting of 774 entrepreneurs from European countries, supported by Eurochambres and national chambers of commerce) debate was held in the European Parliament. An overwhelming majority of represented entrepreneurs emphasised that the continued lack of a single EU-wide patent was damaging to European businesses and called for the creation of the EU patent as soon as possible<sup>9</sup>.

The issue of translation arrangements for the EU patent has also been extensively addressed in the consultation on the Small Business Act – a range of initiatives targeted to the needs of European SMEs in 2008. Again, stakeholders identified high patenting costs as the main obstacle to patent protection in the EU and requested the creation of a unitary EU patent as soon as possible<sup>10</sup>. In their separate submissions to the consultation, businesses in general and SME representatives in particular unequivocally requested a significant reduction of the costs of patenting (including translation costs) for the future EU patent<sup>11</sup>.

Numerous recent position papers from various stakeholders refer to the EU patent and to the translation arrangements. European interest groups representing users of the patent system in Europe, such as BusinessEurope<sup>12</sup>, UEAPME<sup>13</sup> and Eurochambres<sup>14</sup>, confirm that businesses, both large and small, request a simplified, cost-effective and accessible EU patent. National interest groups in many Member States and across industry sectors<sup>15</sup> raise identical issues: direct translation costs, indirect costs *related* to translations (for example fees charged by patent agents and publication fees charged by national patent offices) and statutory complexity (red-tape such as formal requirements to be complied with when filing the translations at the national patent offices) are identified by stakeholders as major obstacles preventing innovative businesses from obtaining patent protection throughout the EU. A new

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<sup>7</sup> Documents and conclusions of the Conference are available at [http://ec.europa.eu/internal\\_market/indprop/rights/index\\_en.htm](http://ec.europa.eu/internal_market/indprop/rights/index_en.htm).

<sup>8</sup> See Council document 6985/08, 28 February 2008 and Council document 8928/08, 28 April 2008.

<sup>9</sup> Results of the European Parliament of Enterprises on 14 October 2008, available at <http://www.eurochambres.eu>.

<sup>10</sup> Small Business Act for Europe, Report on the Results of the Open Consultation, 22 April 2008, available at [www.ec.europa.eu/enterprise/newsroom](http://www.ec.europa.eu/enterprise/newsroom).

<sup>11</sup> UEAPME Expectations on the Proposal for a European Small Business Act, 14 December 2007, available at [www.ueapme.com](http://www.ueapme.com). Response to the Consultation on a Small Business Act for Europe, 2 April 2008, available at <http://www.eurochambres.eu>.

<sup>12</sup> Views on key issues of the patent reform debate in Europe, 11 August 2008, available at <http://www.businessseurope.eu>.

<sup>13</sup> Position on the recent policy developments on the European Community patent, 19 June 2008, available at <http://www.ueapme.com>.

<sup>14</sup> Position paper on the European Patent System, 8 April 2008, available at <http://www.eurochambres.eu>.

<sup>15</sup> Position papers from BDI (Bundesverband der Deutschen Industrie), DIHK (Deutscher Industrie- und Handelskammertag), CBI (Confederation of British Industries), CCIP (Chambre de commerce et d'industrie de Paris), CGPME (Confédération générale des petites et moyennes entreprises), Unioncamere, DigitalEurope, Orgalime, ACT (Association for Competitive Technology), Cefic and others.

approach based on specialised machine translations is generally welcomed, but it is emphasised that such machine translations must not have any legal effect and be used for information purposes only.

## **2. POLICY CONTEXT, PROBLEM DEFINITION AND SUBSIDIARITY**

### **2.1. Policy context**

#### *2.1.1. The Patent Systems in Europe*

In the EU, patent protection can be obtained either through the national patent offices of the EU Member States or the European Patent Office (EPO).

#### *National patent systems*

Each Member State has its own patent office which deals with applications for national patents. If an application and the invention to which it relates meet the requirements of national patent law (in particular the patentability requirements), a national patent is granted. The protection conferred by a national patent is *limited to the territory* of the State concerned. Normally, European inventors and businesses choose to file patent applications at a national patent office first. Following a novelty search and a preliminary examination carried out by the national office, the applicant then decides whether to pursue or abandon the national patent application, apply for a European patent at the EPO, or file a patent application under the international Patent Cooperation Treaty (PCT).

#### *The European patent system*

If the applicant chooses to apply for a European patent, the application will be dealt with by the EPO under the procedures laid down in the European Patent Convention (EPC). The EPC was adopted in 1973 and entered into force in 1977. It does not form part of the EU legal order, but all EU Member States are Contracting States to the EPC<sup>16</sup>.

The EPC has established *centralised* procedures for the search, examination and grant of European patents. On the basis of one single patent application processed in one of the three working languages of the EPO (English, French and German), inventors and businesses can obtain a European patent for one or more Contracting States to the EPC.

Of particular relevance for the present impact assessment is the fact that any patent application is *published* by the EPO eighteen months after the date of filing, in the working language of the EPO in which the application is processed (the language of proceedings) (Article 93 EPC). The application (which comprises claims, description and drawings<sup>17</sup>) is thus made available to the public, in electronic format on the European publication server<sup>18</sup>.

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<sup>16</sup> Other larger Contracting States to the EPC include Croatia, Iceland, Norway, Switzerland and Turkey.

<sup>17</sup> The *claims* define the matter for which protection is sought; they determine the extent of the protection conferred by the patent (Articles 84 and 69 EPC). The *description* indicates the background art, discloses the invention, describes at least one way to carrying it out and indicates the way in which the invention is industrially applicable; the description is used to interpret the claims (Rule 42 and Article 69 EPC).

<sup>18</sup> The European publication server is the EPO's internet-platform for obtaining on-line copies of European patent applications and European patents. New publications are uploaded every week. See

If eventually granted by the EPO<sup>19</sup>, the European patent is published by the EPO in the language of proceedings, together with a translation of the claims in the two other working languages of the EPO (Article 14(6) EPC). The *authentic text* of the European patent is the text in the language of proceedings – both in proceedings before the EPO and in any Contracting State to the EPC (Article 70(1) EPC).

A European patent has the same legal effect as a national patent in the Contracting States to the EPC in which the patent proprietor desires protection for his/her invention. However, the European patent does not take effect *automatically* in most Contracting States. It must first be *validated* in the States in which the patent proprietor wishes protection.

**Validation requirements.** National law may require that the patent proprietor:

- files with the national patent office a translation of the European patent into the official language of the State where protection is desired,
- pays a publication fee to the national patent office, and
- complies with various formal requirements relating in particular to the number of copies to be filed, use of prescribed forms, and time periods.

Where the patent proprietor fails to observe any of the above validation requirements in a particular State, the European patent is deemed to be void *ab initio* in that State. Although the requirement of a translation has always been optional for EPC Contracting States, many countries selected to apply this requirement from the entry into force of the EPC. Other countries that did not initially require translations followed suit, thereby adding costs and complexity for companies in Europe when patenting beyond national borders. For example, as a founding EPC Contracting state, the United Kingdom initially did not require translations into English but introduced such requirements from 1987, ten years after the EPC entered into force<sup>20</sup>.

**The London Agreement.** In order to reduce the costs caused by validation requirements, the Agreement on the application of Article 65 EPC (London Agreement) was adopted in October 2000 by an Intergovernmental Conference of the EPC Contracting States<sup>21</sup>. The London Agreement is an optional scheme, allowing for collective action to reduce patenting costs. It entered into force on 1 May 2008 for fourteen EPC Contracting States of which ten are EU Member States<sup>22</sup>.

Contracting States with an official language in common with one of the EPO working languages that are party who are party to the London Agreement are required to dispense

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<https://data.epo.org/publication-server/?lg=en> for the platform in the English language. Other platforms maintained by EPO also enable on-line access to European patent documents; see [esp@enet](mailto:esp@enet), [epoline](mailto:epoline) and Register Plus.

<sup>19</sup> On average, in 2008, a granted European patent was published 43 months after the application was received, see Annual Report of the EPO, 2008.

<sup>20</sup> UK Intellectual Property Office Manual of Patent Practice, Section 76, at <http://www.ipo.gov.uk/pro-types/pro-patent/p-law/p-manual/p-manual-practice/p-manual-practice-pat1977.htm>

<sup>21</sup> OJ EPO 2001, 550.

<sup>22</sup> The London Agreement entered into force on 1.5.2009 in the following EU Member States: DE, DK, FR, LU, LV, LT, NL, SE, SI and UK. The other States parties to the Agreement are CH/LI, HR, IS and MC.

entirely with translation requirements (Article 1(1) of the Agreement). Within the EU, this applies to France, Germany, Luxembourg and the United Kingdom.

Contracting States not having an official language in common with one of the EPO working languages may require a translation of the *claims* into their official language and nominate one of the working languages of the EPO into which the description should be translated if this is not the language of proceedings at the EPO (Article 1(2) and (3) of the London Agreement). Within the EU, Denmark, Latvia, Lithuania, the Netherlands, Slovenia and Sweden require translation of the claims into their official language. Of these countries, Denmark, the Netherlands and Sweden have nominated English for translations of the description, therefore requiring this translation if the patent has been granted in French or German.

Seventeen Member States are **not** parties to the London Agreement and still require a translation of the entire patent into their official language (Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, Greece, Hungary<sup>23</sup>, Ireland, Italy, Malta, Poland, Portugal, Romania, Slovakia and Spain)<sup>24</sup>. Despite the clear benefits for reducing the costs of patenting new technology for European companies in the domestic market, ratification of the London Agreement has not taken place in most EU Member States, mainly for political reasons.

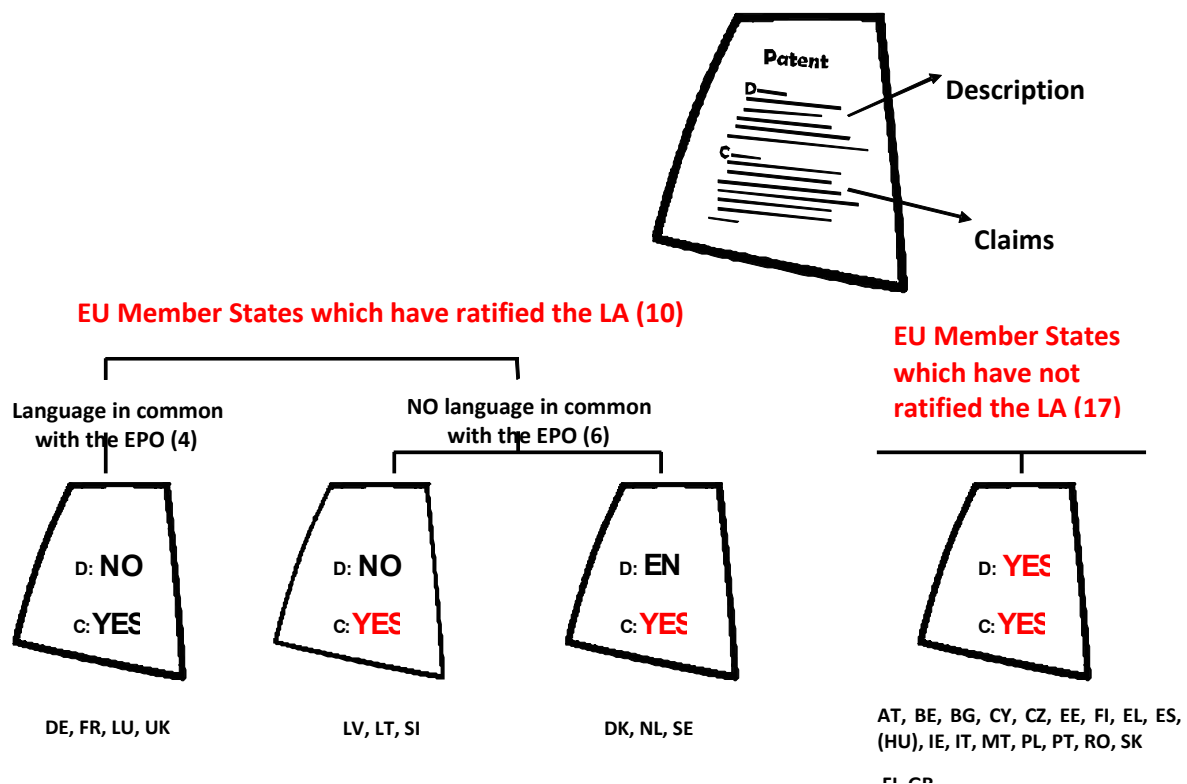
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<sup>23</sup> Hungary is expected to accede to the London Agreement on 1 January 2011.

<sup>24</sup> It should be noted that currently Ireland and Malta do not require a translation of a European patent into Irish and Maltese. For validation in Ireland and Malta, it suffices that the European patent is available in English.



Figure 1 – Translation requirements under the London Agreement in the EU Member States<sup>25</sup>



Source: Economic incongruities in the European patent systems: B van Pottelsberghe de la Potterie and M Mejer (2008)

### 2.1.2. The Community (EU) Patent Proposal

Following a consultation process initiated in 1997 by a Green paper on promoting innovation<sup>26</sup> – which first introduced the concept of creating the Community patent by means of a Regulation – the Commission adopted a proposal for a Regulation on the Community patent in August 2000<sup>27</sup>. This was also a response to calls from the European Council in Lisbon on 23 and 24 March 2000, which underlined the importance of introducing a Community patent without delay.

The Commission proposal aimed at an affordable Community patent in terms of translation costs: once the patent would have been granted in one of the working languages of the EPO (English, French or German) and published in that language together with a translation of the claims into the other two working languages of the EPO, the patent would have taken effect in the EU *without any further translation*. Only where legal proceedings would have been

<sup>25</sup> Source: van Pottelsberghe / Meijer, 2008, The London Agreement and the cost of patenting in Europe, Bruegel Working Paper, 2008/05 and reproduced in "Economic Cost-Benefit Analysis of the Community Patent" by van Pottelsberghe / Danguy, study on behalf of the European Commission; updated on the basis of [www.epo.org/patents/law/legal-texts/london-agreement/status.html](http://www.epo.org/patents/law/legal-texts/london-agreement/status.html)

<sup>26</sup> Promoting innovation through patents – Green paper on the Community patent and the patent system in Europe - COM(97) 314, 24.6.1997.

<sup>27</sup> Proposal for a Council Regulation on the Community patent - COM(2000) 412, 1.8.2000.

initiated against an alleged infringer would the patent proprietor have had to supply a translation of the entire patent.

In March 2003, the Council adopted a common political approach on the Community patent. This provided that patent proprietors would have to supply translations of the claims into all the official languages of the EU Member States which in addition could have had legal effect provided in Article 70(3) EPC<sup>28</sup>. Such a language arrangement would have been significantly more costly to patent proprietors than the original Commission proposal. Although intending to provide protection for third parties in infringement actions when a translation has a narrower scope than the original language, the possible legal effect of claims translations into all EU languages would have created significant legal uncertainty. It was consequently rejected by all users of the patent system as too costly and too risky. Another reason for the rejection was the practical difficulties of supplying numerous translations within a limited time period after the grant of the patent. Following the 2003 common political approach, the Council failed to reach a final agreement on the Community patent.

Given the importance of patent policy for innovation, the Commission launched a broad consultation on the future of patent policy in Europe in January 2006. This re-affirmed the need for action to provide a simple, cost-effective and legally-secure Community patent system, as well as stakeholders' continued support for the concept of a Community patent as yielding the most added value for European industry.

Discussions on the Community patent were re-launched in the Council after adoption by the Commission of the Communication "Enhancing the patent system in Europe" in April 2007<sup>29</sup>, which confirmed the commitment to the creation of a single Community patent as the most affordable and legally secure answer to the challenges with which European businesses are confronted in the field of patents and innovation. The Communication offered to explore with Member States how to simplify the translation arrangements with a view to reduce translation costs of the Community patent while increasing legal certainty for all innovative businesses.

Most recently, in December 2009 the Council adopted conclusions on the Enhanced patent system for Europe and a general approach on the proposal for a Regulation on the EU patent. As explained in Section 1.1, due to the entry into force of the Lisbon Treaty and the change of legal basis for the creation of the EU patent, the translation arrangements for the EU patent must now be included in a separate regulation to be proposed by the Commission.

## 2.2. Problem definition

The lack of an EU patent entails a fragmented system for patent protection in the EU. Patent proprietors appear to refrain from seeking EU-wide patent coverage due mainly to the high costs and complexity of validating European patents in several Member States.

**High costs of validation.** Direct and indirect translation costs can add up to about 40% of the overall costs of patenting in Europe. It has been estimated that a European patent validated in

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<sup>28</sup> Common political approach, pt. 2.3: "the applicant must, upon the grant of the patent, file a translation of all claims into all official Community languages except if a Member State renounces the translation into its official language. The translation will be filed with the EPO and the cost borne by the applicant", see Council document 6874/03, referred to in footnote 4.

<sup>29</sup> Communication from the Commission to the European Parliament and the Council - COM(2007) 165.

13 countries is more than 10 times more expensive than a patent in the US or Japan<sup>30</sup>. These costs particularly affect SMEs, young innovative companies (YICs), start-up companies and public research organisations, and they impede access to the patent system.

As explained in section 2.1.1.2, national laws of most EU Member States require that the patent proprietor supplies translations of the patent into the official languages of the Member States in which protection is sought. The translations must be filed with the national patent offices, which shall make them available to the public. Significant costs, red-tape and complexity accrue in this process:

- Costs of technical translations. Specialised translators are needed to translate the technical text contained in patents. On average, 85 EUR are charged per page<sup>31</sup>. The number of pages to be translated depends on the length of the patent: a patent of typical length contains 15 pages of description, 4 pages of claims and 1 page of drawings<sup>32</sup>.

- Fees charged by patent agents. Local patent agents often act as intermediaries between the patent proprietor and the national patent offices where the translations are to be filed<sup>33</sup>. They may offer to arrange for translations or verify translations carried out by external translators, or they may offer to ensure that formal requirements laid down by national law are complied with<sup>34</sup>. Fees must be paid by the patent proprietor for such services, and they vary from around 150 EUR to 600 EUR per validation of a patent depending on the Member State<sup>35</sup>.

- Official fees charged by national patent offices for the publication of the translations. *Figure 2* below shows the publication fee (also known as "printing fee" in countries where the publication still consists in printing the patent on paper) for a European patent of typical length (20 pages)<sup>36</sup>.

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<sup>30</sup> Bruno van Pottlesberghe de la Potterie and Didier François, the Cost factor in Patent Systems, Université Libre de Bruxelles Working Paper WP-CEB 06-002, Brussels 2006, see pp.17 et seq.

<sup>31</sup> This estimation was taken as a basis by the Council in the common political approach of 3.3.2003. It is confirmed by data provided by translation service providers.

<sup>32</sup> Harhoff (et al.), referred to in note 27, arrive at a actual mean number of 21,24 pages per patent. The "Study on the Cost of Patenting" carried out by Roland Berger Market Research finds an average of 23 pages, of which 4 pages of claims.

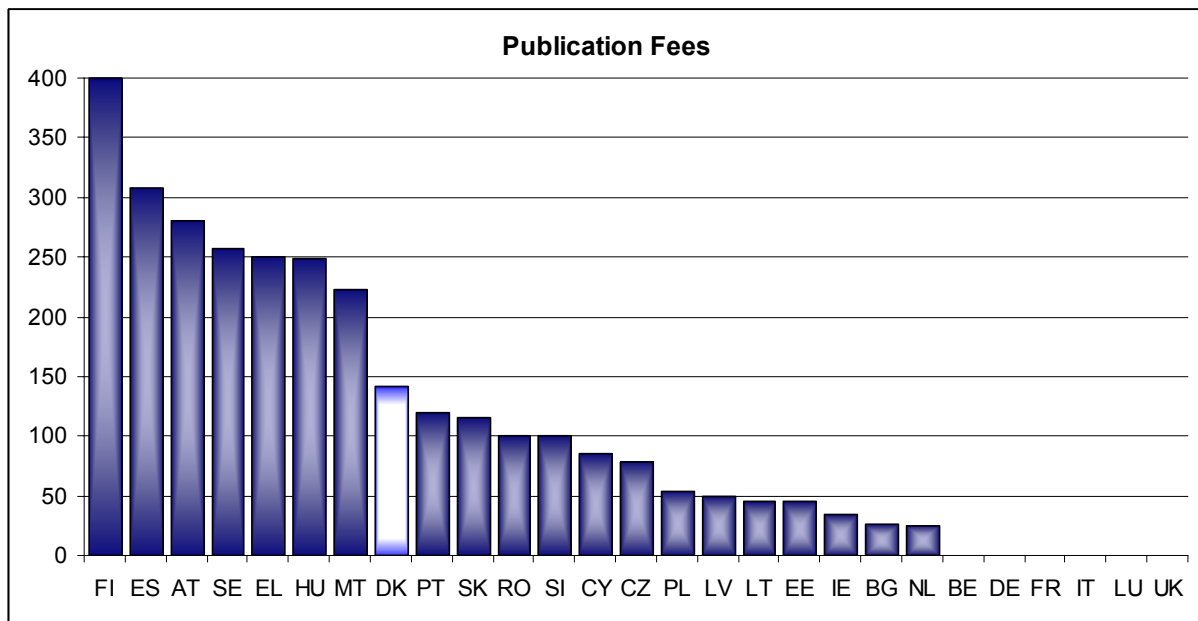
<sup>33</sup> In some Member States, national law appears to still *require* that such formalities be carried out by a local patent agent.

<sup>34</sup> An exhaustive list of these requirements can be found in the EPO's publication "National law relating to the EPC", 14<sup>th</sup> edition, June 2009, pages 99-135. See also <http://www.epo.org/patents/law/legal-texts/html/natlaw/en/iv/index.htm>.

<sup>35</sup> Source: Interviews with patent agents and Roland Berger Study.

<sup>36</sup> See "National law relating to the EPC", 14<sup>th</sup> edition. Further complexity is added by national provisions on (i) additional page fees for longer patents and (ii) special fee schedules where the patent proprietor files an electronic version of the patent.

*Figure 2 – Publication fee charged in EU Member States for a typical European patent*

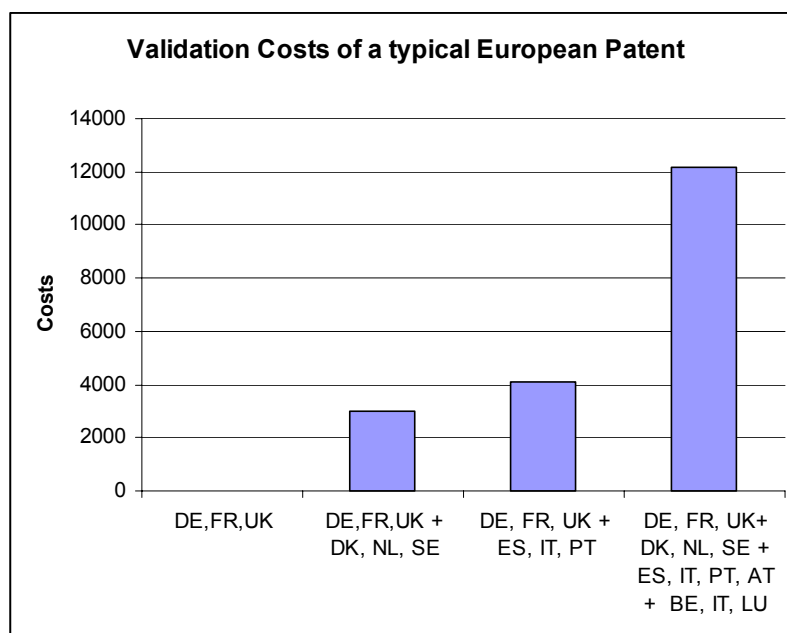


Source: *National Law relating to the EPC, 14<sup>th</sup> Edition*

Figure 3 below illustrates the total validation costs (including direct translation costs and estimated related costs such as patent agent fees and publication fees) for a European patent of typical length (granted by the EPO in German), in respectively three, six and thirteen EU Member States:

- if the patent proprietor wishes protection in only three Member States – Germany, France and UK (which are parties to the London Agreement) – no validation requirements apply and no costs are incurred;
- if protection is desired in six Member States (which are all parties to the London Agreement), costs amount to 3 000 EUR;
- if protection is desired in six Member States (of which three are *not* parties to the London Agreement), costs amount to more than 4 500 EUR;
- finally, validation costs are more than 12 000 EUR when protection in thirteen EU Member States is desired.

*Figure 3 – Example of total validation costs (in EUR) of a European patent of typical length in a selection of EU Member States*



Source: own calculations

It should be borne in mind that for a longer patent, (for example, in the field of biotechnology, where patents can extend to 200 pages) the validation costs for only 13 Member States may amount to more than 140 000 EUR. Moreover, an average length patent is estimated to cost between 22 000 and 26 000 EUR in validation costs for EU-wide coverage.

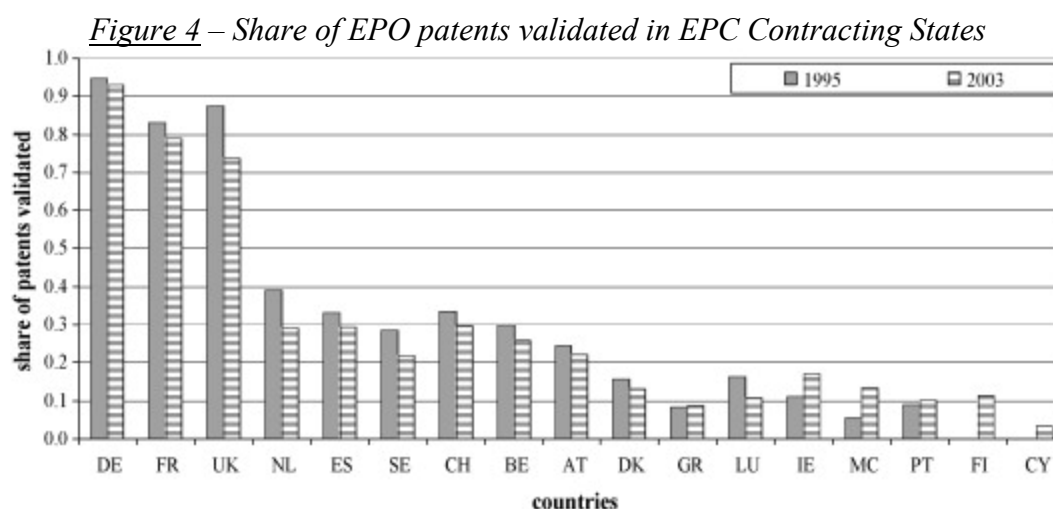
**Fragmentation due to low number of validations.** A European patent is usually validated in only a few countries selected by the patent proprietor: currently, a European patent is, on average, validated in only five EU Member States<sup>37</sup>. The number of validations has even *decreased* over the last 15 years, although the number of EPC Contracting States has *increased* from 17 (in 1995) to 37 today<sup>38</sup>. There is no straightforward explanation for this slight decline since a number of factors affect the patenting strategy for a company and decisions are taken on a case-by-case basis. Possible explanations include a general rise in number of applications and granted patents (e.g. about 78000 applications were received at the EPO in 1995 compared to more than 146000 in 2008) resulting in larger company patent portfolios and therefore fewer designations in order not to increase the overall costs of their patent portfolio.

Figure 4 below shows the share of European patents that were validated in the EPC Contracting States in 1995 and 2003. In 2003, 95% of all patents granted by the EPO were

<sup>37</sup> See, for example, "Study on the Cost of Patenting" carried out by Roland Berger Market Research, August 2004.

<sup>38</sup> See "Economic cost-benefit analysis of the Community patent" – study by van Pottelsberghe / Danguy on behalf of the European Commission, on the basis of data provided by the EPO.

validated in Germany, 80% were validated in France and 75% in the United Kingdom. For all other countries, the validation rate is below 40%<sup>39</sup>.



The decision of a patent proprietor to validate a European patent in a particular country depends on several factors: high costs (arising from direct translation costs, publication fees, annual renewal fees) have a strong negative impact, but other factors such as a country's GDP, population, number of years of EPC membership, and distance to other countries also impact on the validation decision<sup>40</sup>. In practice, the European patent thus provides patent protection in mainly a few EU Member States. This has far-reaching consequences: (i) it reduces the commercial value of the patented invention; (ii) it impedes businesses' cross-border activities; (iii) it leaves business opportunities unexploited. Worse still, it entails a fragmented system for patent protection in the EU with negative effects on the functioning of the Internal Market; patent right "borders" are being erected around individual Member States because the territorial limits of patent rights are left intact. Finally, the fragmentation leads to reduced dissemination of technological information as the translations of patents into most of the EU languages are not available.

Taking into account the number of validations each year across all EU Member States, it is estimated that between 205 and 230 million EUR is spent by companies on translations, validations and professional charges. Moreover, it should be borne in mind that this overall figure covers European patents, validated on average in only 5 Member States. If all patents were validated in all EU Member States, this figure would be many times higher.

On the other hand, the EU patent would provide protection *traversing* the internal borders of the EU, embracing and covering the entire Internal Market. The EU patent – by establishing a single property right border around the Internal Market – would thus avoid the creation of *internal* patent right borders along the national borders of the EU Member States. This has relevance to the principle of free movement of goods in the Internal Market.

<sup>39</sup> Harhoff / Hoisl / Reichl / van Pottelsberghe, 2009, "Patent validation at the country level: the role of fees and translation costs", Research Policy, November 2009. Italy is not included due to the lack of information on validations in Italy. Broad estimates by the EPO suggest that 30–40% of the patents granted by the EPO are generally validated in Italy.

<sup>40</sup> Obviously, these latter factors are constant over time and cannot serve as leverage for policy options.

As explained above, the London Agreement lowers the costs relating to translations for patent proprietors, but it does not overcome the fragmentation caused by the national patent right borders created by the European patent after grant. On the contrary, by cutting validation costs entirely in four Member States (DE, FR, LU and the UK) but only *reducing* costs in six other Member States where translations of the *claims* still have to be supplied (DK, LT, LV, NL, SE, SI) – *while* validation requirements are left untouched in seventeen Member States – the London Agreement actually risks *reinforcing* patent proprietors' selective validation practices. Patent right borders will therefore be left intact within the EU. This has major undesirable effects on the functioning of the Internal Market:

- Among other factors in commercial decisions, the concentration of patent protection in a few major Member States (often those which have ratified or acceded to the London Agreement) risks leading to a concentration of investments in R&D and technology transfers in these States. In smaller and new Member States (often those which have *not* ratified or acceded to the London Agreement) continuous low patenting activity is likely to have a knock-on effect on R&D activity and innovation, making it particularly difficult for SMEs in these States to grow and exploit the opportunities of the Internal Market.
- In relation to the enforcement of patent rights, if goods enter the EU through a Member State where a patent is not in force, the patent proprietor may not rely on the EU Customs Code<sup>41</sup> to withhold the goods suspected to be in breach of the patent. The goods have to be released by the customs authorities and thus allowed to circulate freely within the Internal Market, possibly also including the Member States where the patent is in force. The identification of the goods in breach of a patent becomes very complicated at this stage.

**Access to technological information.** A further shortcoming of the current translation arrangements for European patents is the practical difficulties in accessing the translations at some national patent offices. While some offices do make the translations available electronically<sup>42</sup>, others only provide access to paper copies that can be consulted in the public reading rooms of the national patent offices, or copied at the expense of interested third parties. The number of translations consulted in Member States where translations are only available in printed form is extremely low – less than 2% according to estimates<sup>43</sup>.

It must also be kept in mind that the publication of the translations takes place very late in the "life cycle" of the patent – often not before five years after the date of filing of the patent application. Yet innovative businesses must keep abreast of the latest technological developments in their field by monitoring new patent *applications* filed by their competitors – which are published already eighteen months after the date of filing (in the language of proceedings before the EPO) – not by reading the translations supplied several years later. In practice, no meaningful "veille technologique" can take place only on the basis of the translations filed at the national patent offices after the patent has been granted.

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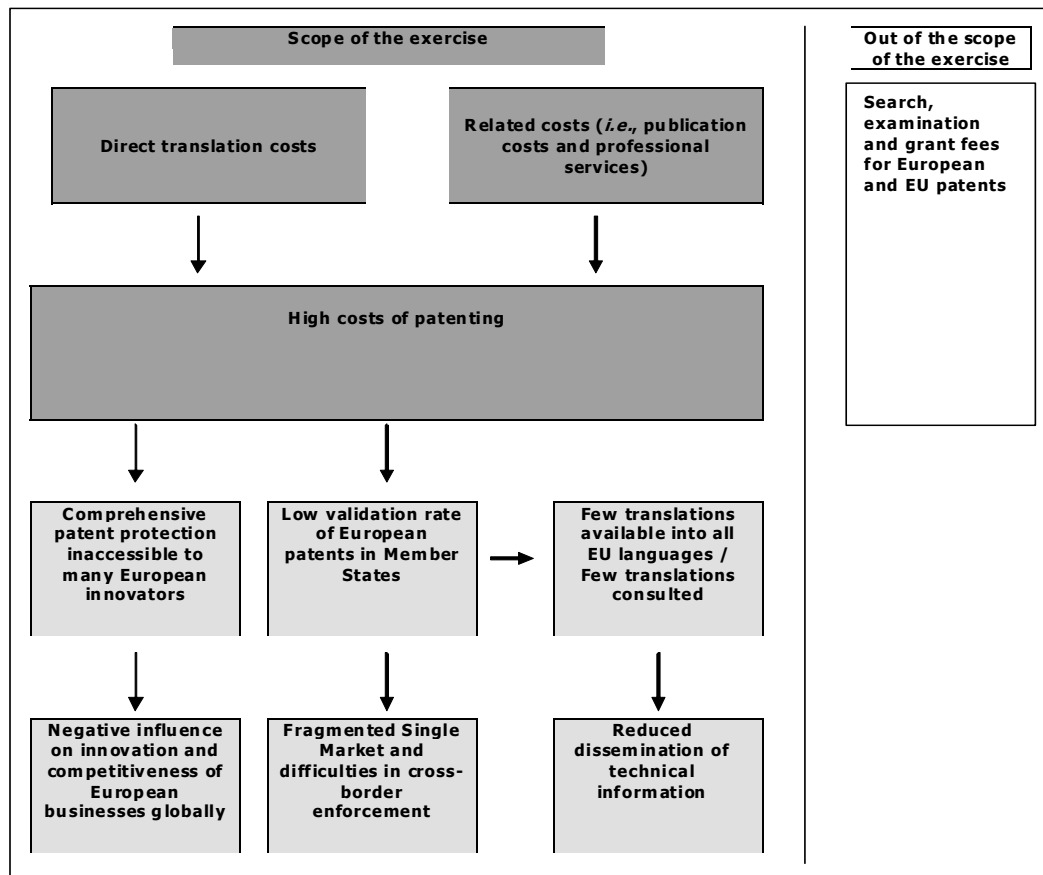
<sup>41</sup> Council Regulation (EEC) No 2913/92 of 12 October 1992 establishing the Community Customs Code (OJ L 302, 19.10.1992, p. 1), as amended.

<sup>42</sup> CDs and DVDs are still used for storing and copying information but their use will in future be limited to static data collections. The introduction of online publication servers constitutes the major shift which will shape patent information policy in the 21<sup>st</sup> century, radically reducing the interval between publication and distribution of information.

<sup>43</sup> Response to Written Question no 88618 of 14.3.2006 (JO Question écrites, Assemblée nationale, 25, 20.06.2006, p.6598). See also Rapport de la Mission de Concertation sur le Brevet Européen "Les enjeux de l'Accord de Londres" (Rapport Vianès).

The problems of the current patent system in Europe are summarised in *Figure 5* below.

*Figure 5 – Problems of the current patenting system*



As this impact assessment deals only with the translation arrangements for the EU patent, other costs of obtaining and maintaining a patent, such as pre-grant fees for the EU patent (e.g. search, examination, grant fees) and renewal fees, fall outside the scope of this exercise<sup>44</sup>.

### 2.3. Subsidiarity

The creation of European intellectual property rights to provide uniform protection throughout the EU and associated language arrangements is provided for by Article 118 TFEU. Only the EU is entitled to act to create uniform intellectual property rights in the EU.

The problems outlined above can only be addressed by a single EU-wide patent that does not require national validations and that has a drastically reduced translation regime compared to the current European patent.

<sup>44</sup> This is addressed in detail in the studies carried out for the European Commission by Bruno van Pottelsberghe: "Economic cost-benefit analysis of the Community patent" of 7 April 2009 and "Patent fees for a sustainable EU patent system" (forthcoming).



### 3. OBJECTIVES

The Europe 2020 strategy adopted by the Commission on 3 March 2010<sup>45</sup> puts forward three mutually-reinforcing priorities: smart, sustainable and inclusive growth. The first of these requires strengthening knowledge and innovation as drivers for future growth. A key element of this is improving the framework conditions for businesses to innovate, and the Europe 2020 strategy expressly mentions the creation of a single EU patent and a specialised patent court. The EU patent will provide for uniform protection of patent rights in the Internal Market, thereby creating more favourable conditions for investment in R&D, particularly in regions with below average innovation activity<sup>46</sup>. This should therefore facilitate reaching the 3% target of GDP invested in R&D affirmed by Europe 2020.

As consultations have shown, the creation of the EU patent should not be a goal in itself. The EU patent needs to be accessible for all European businesses, including SMEs. This will require translation arrangements which are cost-effective, simplified and legally secure.

**Cost-effective.** The translation arrangements need to avoid high costs to make the EU patent attractive for innovative businesses. In particular, the EU patent system must be competitive with the patent systems in other major economies of the world.

**Simplified.** The translation arrangements must consider the impact on accessibility of the patent system to innovators. The fundamental objective of the patent system – which is to encourage innovation through offering an exclusive right (limited in time) in exchange for full disclosure of the invention for the dissemination of technological information in different languages – must be balanced against costs.

**Legally secure.** The translation arrangements must ensure legal certainty. Only the text in a language in which an EU patent is granted should have legal value in order to avoid legal risks related to errors in translations. Translations, especially machine translations should not have any legal effect and be for information purposes only.

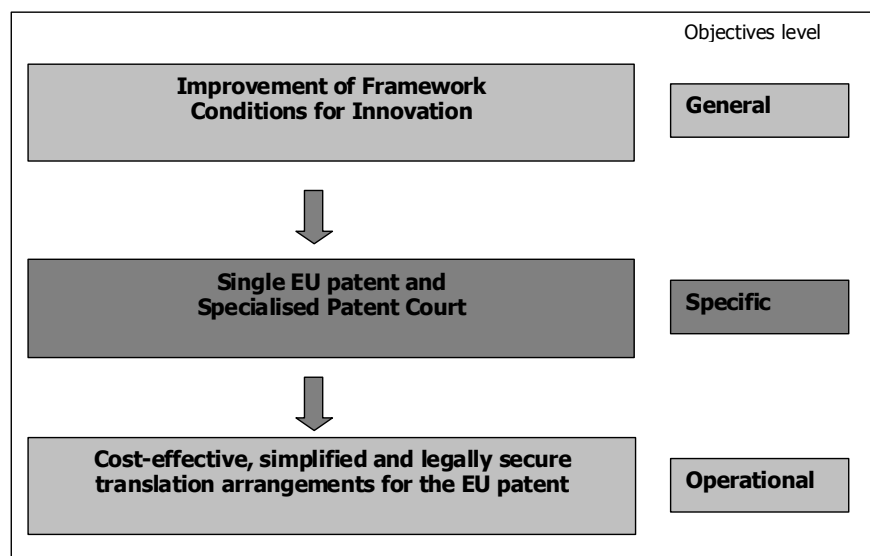
These objectives are summarised in *Figure 6* below.

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<sup>45</sup> Europe 2020 "A strategy for smart, sustainable and inclusive growth" - COM(2010) 2020.

<sup>46</sup> [http://www.proinno-europe.eu/sites/default/files/newsroom/2010/02/I981-DG%20ENTR-Report%20RIS%20\(Web\).pdf](http://www.proinno-europe.eu/sites/default/files/newsroom/2010/02/I981-DG%20ENTR-Report%20RIS%20(Web).pdf).

*Figure 6 – Hierarchy of objectives for translation arrangements for the EU patent*



#### 4. POLICY OPTIONS AND ANALYSIS OF THEIR IMPACTS

##### 4.1. Introduction

All policy options chosen and analysed are based on the following principles:

**1) Central filing of translations and electronic publication.** Any translation to be filed at the time of grant shall be filed centrally at the EPO, which shall be in charge of the electronic publication of the EU patent in the language of proceedings and any translation of the claims. No requirement relating to professional representation going beyond Article 133 EPC shall be imposed on patent proprietors for filing the translations.

The implementation of this principle alone will entail a considerable improvement as compared to the current situation (in terms of cost reduction and simplification). It conforms to the Commission's overall administrative burden reduction exercise aiming at freeing up and redirecting business resources in order to enhance the competitiveness of innovative businesses in the Member States.

**2) Automatic machine translations.** The development of automatic machine translation (AMT) programs for patent documents is essential in order to improve the dissemination of technological information for researchers throughout the EU, as well as giving the EU patent a truly multilingual character. A project in this field has been underway at the EPO using English as pivot language to translate between German, French, Spanish, Italian, Swedish and Portuguese. Other languages are in preparation. The Commission along with the EPO is also supporting a project for machine translations (Patent Language Translations Online, PLuTO)<sup>47</sup>, which involves developing translation software on the basis of patent

<sup>47</sup> Information available at [http://cordis.europa.eu/home\\_en.html](http://cordis.europa.eu/home_en.html).

documentation covering all official languages of the EU Member States over the next five years. The creation of the EU patent would necessitate the acceleration of work and the rolling out of a full programme as quickly as possible. Automatic machine translations would be available free of charge for information purposes only and would have no legal effect<sup>48</sup>.

The availability of a fully-fledged AMT system promises significant improvements for users monitoring the content of new patent applications in foreign languages. As mentioned above, innovative businesses need to keep abreast of the latest technological developments in their field by monitoring new patent applications filed by their competitors – which are published 18 months after the date of filing but only in the language of proceedings before the EPO. AMT will enable instant access to these applications for all users.

**3) Full translation in case of dispute.** In the case of a dispute relating to an EU patent, the patent proprietor shall provide, at his/her expense and at the request of an alleged infringer, a full translation of the patent into an official language of the Member State in which the alleged infringement took place or in which the alleged infringer is domiciled. It is estimated that less than 1% of all patents become subject to litigation during their term.

**4) Reimbursement of costs.** An application for an EU patent may be filed in any language<sup>49</sup>. Where the language of filing is not an official EPO language, a translation of the application must be provided, within a prescribed time period, so that the application can be processed by the EPO. If a natural or legal person having his/her residence or principal place of business within a Member State that does not have as an official language among the language of proceedings before the EPO files an application for an EU patent in the official language of his/her Member State, the costs of translation shall be borne by the system. This would be established under the implementing provisions set by a Select Committee of the Administrative Council of the EPO composed of representatives from the EU and all Member States. Reimbursement of costs would apply in the same way across all options investigated in this impact assessment and would be covered by fees collected after EU patents. Implementation of this system is therefore not intended to impact on the EU budget.

The following options will be explored:

**Base-line scenario** – The Commission does not propose any translation arrangements for the EU patent.

**Option 1** – EU patents are processed, granted and published in English.

**Option 2** – EU patents are processed, granted and published in one of the three working languages of the EPO; the claims are translated into the other two working languages of the EPO.

**Option 3** – EU patents are processed, granted and published in one of the three working languages of the EPO; the claims are translated into the four other most commonly spoken languages in the EU.

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<sup>48</sup> An automatic machine translation can be requested free of charge via the esp@cenet portal <http://ep.espacenet.com/>. Gateway can be the EPO, the Commission or any national patent office of the Member States, in the respective language. Once a relevant patent document has been identified, the user must select the target language for the translation and click on the button "Translate this text". The translation will be generated within 30 to 60 seconds.

<sup>49</sup> This is prescribed by Article 5 of the Patent law Treaty 2000. See also Article 14(2) EPC.

**Option 4** – EU patents are processed, granted and published in one of the three working languages of the EPO; the claims are translated into the other official languages of the EU Member States.

The following analysis of the policy options concentrates on the main economic impacts relating to the scope of this exercise. The analysis will assess the economic impacts of the different policy options on the various users of the patent system, namely natural or legal persons applying for patents in Europe. In particular, we assess impacts on the following groups:

- The analysis separately assesses impacts on the users of the patent system in general and SMEs in particular.
- Impact on European innovators in general whose inventions may or may not be protected by patents is also analysed.
- Another group affected are the patent information users, namely those following technological developments by means of available patent information (including those users whose technology may potentially infringe existing patents).
- Finally, we also include an assessment of social impacts on professional services related to translations, including services by patent translators and patent attorneys mainly dealing with translations.

Considering the narrow scope of the proposal, impacts are focused on the effects of the translation arrangements for the EU patent.

#### **4.2. Base-line scenario – The Commission does not propose any translation arrangements for the EU patent**

##### *4.2.1. Description*

The **base-line scenario** is that no action is taken: the Commission does not propose any regulation establishing language arrangements for the EU patent.

The base-line scenario could see further Member States acceding to the London Agreement. Accession is, however, not only optional but also a lengthy and complex process as parliamentary approval procedures must take place in each country. Accession by all remaining 17 Member States is unlikely to happen, even in the long run. There are several Member States that have not expressed any intention to accede to the London Agreement.

##### *4.2.2. Analysis*

In order for the EU patent to come into existence, the Council must adopt a Regulation on the translation arrangements for the EU patent, on a proposal by the Commission. If the Commission does not present a proposal on translation arrangements, the EU patent will not come into existence. This will amount to a *de facto* withdrawal of the Commission proposal of 1 August 2000. This is contradictory to the Conclusions and General Approach adopted by the Council on 4 December 2009 and to the Commission's recent Europe 2020 Strategy which highlights the creation of the EU patent in the "Innovation Union" Flagship Initiative.

The base-line scenario further implies renouncing on addressing the shortcomings of the current European patent system with its high costs caused by translation and validation requirements, as well as its negative impact on the functioning of the Internal Market due to fragmentation resulting from patent proprietors' validation practices.

As far as further potential accessions to the London Agreement are concerned, it should be kept in mind that, among the seventeen Member States which are not parties to the London Agreement, only four (AT, BE, IE and MT) have an official language in common with one of the working languages of the EPO. The other thirteen may require a translation of the claims into their national language. It follows that, even if it is assumed that all EU Member States would accede to the London Agreement in the long run, the eventual language arrangement for the European patent would resemble the language arrangement agreed in the 2003 common political approach should the patent proprietor seek protection in all EU Member States. As mentioned, this approach was rejected by all users of the patent system in Europe. Worse still, the London Agreement fails to address the requirement that translations must be filed *at the national patent offices*, with the associated costs and complexity.

Beyond a slight drop in translation costs resulting from further accessions to the London Agreement and further development of electronic machine translation programs, this option would provide no additional benefit to users of the patent system.

*Table 1 – Expected impact of the baseline scenario*

| Policy Option     | Users of patent system |      | Innovators in general | Patent information users | Professional services related to translations |
|-------------------|------------------------|------|-----------------------|--------------------------|---|
|                   | Overall                | SMEs |                       |                          |   |
| Baseline scenario | 0                      | 0    | 0                     | 0                        | 0   |

Magnitude of impact compared with the base-line scenario: ++ strongly positive; + positive, -- strongly negative; - negative.

### 4.3. Option 1 – EU patent processed, granted and published in English

#### 4.3.1. Description

In any proceedings relating to the EU patent before the EPO, English shall be the language of proceedings<sup>50</sup>. The EU patent shall be granted in that language, and no further translation shall be required. The EU patent (claims, description and any drawing) shall be published on the European publication server in English only.

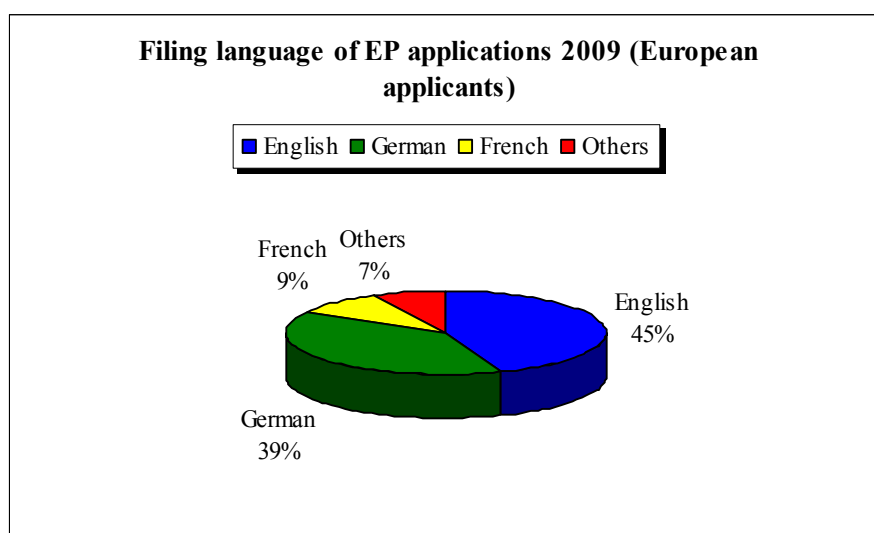
<sup>50</sup> This would be without prejudice to the applicant's right to file the application in any language (Article 5 Patent Law Treaty; Article 14(2) EPC). A translation of the application into English would have to be filed within a prescribed time period.

#### 4.3.2. Analysis

Overall, as compared to the base-line scenario where an EU patent would not become available, this option could have a positive impact on users of the patent system in Europe. As no translation would be required any more – neither at the time of grant, nor after grant – this Option could result in significant cost advantages and simplification if only the translation requirements are considered. Particular benefits would accrue to users that currently file European patent applications in English in any event as the requirement to translate the claims into French and German at the time of grant would disappear. However, an important proviso needs to be made as Option 1 would have a negative impact on many European users, in particular European SMEs that currently file European patent applications in French and German.

The possibility to apply and have applications processed in French and German is widely used by applicants originating from Europe: around 48% of all applications originating from Europe are filed in French or German at the EPO<sup>51</sup>.

*Figure 7– Filing language of European patent applications (European applicants)*



Source: internal EPO data

The vast majority of these applications are filed by French and German applicants, but also other European applicants – from Austria, Belgium, Italy, Luxembourg, Poland – file and have their applications processed in French and German at the EPO.

Option 1 would result in a profound change to the tried and tested three-language regime of the EPO. The flexibility of the existing language regime – which allows a choice between English, French and German as the language of proceedings before the EPO – would not be available for EU patent applications. This would impact on users currently filing in French and German. During proceedings before the EPO, all communication with the EPO – be it in writing or orally – would need to take place in English. In case of opposition proceedings, companies would incur additional translation costs as all relevant documents would have to be translated into English. Oral proceedings at the EPO would likewise be held in English only.

<sup>51</sup> Internal EPO data, 2009.

As a consequence, companies currently using French or German as the language of proceedings before the EPO would have to make significant practice changes for processing EU patent applications in English. In addition, representatives of these applicants would be required to undergo intensive retraining to act before the EPO in English, including the filing of amendments during the examination process. This would result in significant additional costs and complexities and loss of flexibility for users currently using French or German as is the case for about half of the patents granted to European companies. By introducing such a change compared to the current system, the EU patent may be less attractive to companies currently among the most intensive users of the patent system. The EU patent may therefore not bring the expected benefits as its use could be low for companies currently not using English.

Other groups affected, including patent information users who would only have EU patents in a single language and providers of professional services related to translations, would be negatively impacted. Only translators with English as a mother tongue would be positively affected as all applications for EU patents as well as all documents relating to proceedings before the EPO would need to be translated into English.

*Table 2 – Expected impact of Option 1*

| Policy Option   | Users of patent system |      | Innovators in general | Patent information users | Professional services related to translations |
|---|------------------------|------|-----------------------|--------------------------|---|
|   | Overall                | SMEs |                       |                          |   |
| Option 1  | +                      | -    | +                     | -                        | --  |
| Magnitude of impact compared with the base-line scenario: ++ strongly positive; + positive, -- strongly negative; - negative. |                        |      |                       |                          |   |

*Table 3: Validation Costs under Option 1 – Cost Savings Compared to Baseline Scenario*

|                             | Costs in EUR (for coverage in 27 Member States)                        | Costs in EUR of baseline scenario (for average patent covering only 5 Member States) | Costs in EUR of patent covering all Member States under baseline scenario |
|-----------------------------|--|--|---|
| Validation costs per patent | Nil (excluding costs for applicants filing in DE and FR changing work) | 3400   | 24 000  |

|  |  |             |              |
|--|--|-------------|--------------|
|  | practices to EN)   |             |              |
| Application and validation costs per patent                                      | 5500 <sup>52</sup>   | 8900        | 29500        |
| Total Validation Costs, if 60000 patents are validated each year                 | 102 million (50% EU patents)<br>51 million (75% EU patents)  | 204 million | 1.44 billion |
| Total Application and Validation Costs, if 60000 patents are validated each year | 432 million (50% EU patents)<br>381 million (75% EU patents) | 534 million | 1.77 billion |

#### 4.4. Option 2 – EU patent processed, granted and published in one of the three working languages of the EPO; translation of the claims into the other two working languages of the EPO

##### 4.4.1. Description

This option corresponds to the current regime applicable under the EPC:

- in any proceedings relating to the EU patent application before the EPO, one of the three working languages of the EPO shall be the language of proceedings;
- the EU patent shall be granted in the language of proceedings;
- at the time when the EU patent is granted, the patent proprietor shall supply to the EPO a translation of the claims into the two working languages of the EPO other than the language of proceedings.

The following shall be published on the European publication server:

- the EU patent (claim, description and any drawing) in the language of proceedings, and
- the translation of the claims in the two working languages of the EPO other than the language of proceedings.

##### 4.4.2. Analysis

Overall, as compared to the base-line scenario where an EU patent would not become available, this option would have a positive impact on users of the patent system in Europe. By doing away with all translations after grant and associated validation requirements, this

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<sup>52</sup> Covers application, search, examination, grant and renewal fees up to an including the 5<sup>th</sup> year of the patent.



option results in significant cost reductions and simplification for all users of the patent system.

The translation costs under this option would amount to approximately 680 EUR per patent<sup>53</sup>. This corresponds to the current average cost of the translation of the claims into the two working languages of the EPO other than the language of proceedings (Article 14(6) EPC).

Option 2 corresponds to what the Commission suggested in its initial proposal for a Regulation on the Community patent with respect to manual translations<sup>54</sup>. This proposal did not find sufficient support in the Council prior to adoption of the common political approach of 2003. Subsequently, the availability of automatic machine translations in all EU languages has been added as a new element. On this basis, a large majority of Member States would be prepared to consider not requiring manual translation of claims.

In contrast with Option 1, it should be emphasised that Option 2 would not affect the language regime of the EPC and thus would not entail any change for applicants; the translation requirement at the time of grant would be kept at the minimum required today for a European patent.

This option would result in benefits for most groups affected by the measure, including all users of the patent system (as well as SMEs), innovators in general and patent information users. Only providers of professional services related to translations would be negatively affected as translations requirements after grant and associated costs would disappear.

*Table 4 – Expected impact of Option 2*

| Policy Option  | Users of patent system |      | Innovators in general | Patent information users | Professional services related to translations |
|--|------------------------|------|-----------------------|--------------------------|---|
|  | Overall                | SMEs |                       |                          |   |
| Option 2   | ++                     | ++   | ++                    | +                        | --  |
| Magnitude of impact compared with the base-line scenario: ++ strongly positive; + positive, -- strongly negative; - negative |                        |      |                       |                          |   |

*Table 5: Validation Costs under Option 2 – Cost Savings Compared to Baseline Scenario*

|                             | Costs in EUR (for coverage in 27 Member States) | Costs of baseline scenario (for average patent covering only 5 Member States) | Costs of patent covering in 27 Member States under baseline scenario |
|-----------------------------|---|---|--|
| Validation costs per patent | 680   | 3400  | 24 000   |
| Application and             | 6180  | 8900  | 29500  |

<sup>53</sup> 4 pages of claims x 85 EUR/page x 2 languages = 680 EUR.

<sup>54</sup> Proposal for a Council Regulation on the Community patent - COM(2000) 412.

|  |  |             |              |
|--|--|-------------|--------------|
| validation costs per patent  |  |             |              |
| Total Validation Costs, if 60000 patents are validated each year                 | 122,4 million (50% EU patents)<br>81,6 million (75% EU patents)  | 204 million | 1.44 billion |
| Total Application and Validation Costs, if 60000 patents are validated each year | 452,4 million (50% EU patents)<br>411,6 million (75% EU patents) | 534 million | 1.77 billion |

**4.5. Option 3 – EU patent processed, granted and published in one of the three working languages of the EPO; translation of the claims into the four other most commonly spoken languages in the EU; one translation of the claims (at the choice of the patent proprietor) shall have limited legal effect**

*4.5.1. Description*

This option follows, for the granting procedure, the current regime applicable to European patent applications and adds at the time when the EU patent is granted, the requirement that the claims be translated into the four other most commonly spoken EU languages:

- in any proceedings relating to the EU patent before the EPO, one of the three working languages of the EPO shall be the language of proceedings;
- the EU patent shall be granted in the language of proceedings;
- at the time when the EU patent is granted, the patent proprietor shall supply a translation of the claims into the four other most commonly spoken EU languages (that is, two working languages of the EPO other than the language of proceedings and the two other most spoken languages, namely Italian and Spanish).

The following shall be published on the European publication server:

- the EU patent (claim, description and any drawing) in the language of proceedings, and
- the translation of the claims in the four most commonly spoken languages of the EU.

*4.5.2. Analysis*

This option builds on Option 2 analysed above but adds two additional translations of claims into the most spoken languages in the EU. Compared to the base-line scenario where an EU patent would not become available, Option 3 (equally to Option 2) would generally have a positive impact on users of the patent system in Europe. It would result in significant simplification of the system as well as cost reductions for all users.

Compared to Option 2, Option 3 would reinforce the multilingual character of the EU patent. However, the direct translation costs under this option would amount to approximately 1 360 EUR per patent<sup>55</sup> and would be twice as much as under Option 2. By contrast, compared to Option 4, which would require at least twenty translations, Option 3 would still be more affordable to all users of the patent system. Patent information users would also benefit from the publication by the EPO of the claims in the most spoken EU languages. Compared to Option 4, professional services providers would experience a negative impact, but less than under Option 2 (as translations would be needed into the four most widely spoken languages, but would not be required for the other EU languages).

*Table 6 – Expected impact of Option 3*

| Policy Option | Users of patent system |      | Innovators in general | Patent information users | Professional services related to translations |
|---------------|------------------------|------|-----------------------|--------------------------|---|
|               | Overall                | SMEs |                       |                          |   |
| Option 3      | ++                     | +    | ++                    | ++                       | -   |

Magnitude of impact compared with the base-line scenario: ++ strongly positive; + positive, -- strongly negative; - negative

*Table 7: Validation Costs under Option 3 – Cost Savings Compared to Baseline Scenario*

|  | Costs in EUR (for coverage in 27 Member States)                  | Costs of baseline scenario (for average patent covering only 5 Member States) | Costs of patent covering in 27 Member States under baseline scenario |
|--|--|---|--|
| Validation costs per patent  | 1360   | 3400  | 24 000   |
| Application and validation costs per patent                                      | 6860   | 8900  | 29500  |
| Total Validation Costs, if 60000 patents are validated each year                 | 144,8 million (50% EU patents)<br>112,2 million (75% EU patents) | 204 million   | 1.44 billion   |
| Total Application and Validation Costs, if 60000 patents are validated each year | 474,8 million (50% EU patents)<br>444,2 million (75% EU patents) | 534 million   | 1.77 billion   |

<sup>55</sup> 4 languages x 4 pages of claims x 85 EUR = 1360 EUR.

#### **4.6. Option 4 – EU patent processed, granted and published in one of the three working languages of the EPO; translation of the claims into the other official languages of the EU Member States**

##### *4.6.1. Description*

This option corresponds to the common political approach of 3 March 2003:

- for the pre-grant phase, the current regime applicable to European patent applications would apply: in any proceedings relating to the EU patent before the EPO, one of the three working languages of the EPO shall be the language of proceedings;
- the EU patent shall be granted in the language of proceedings;
- at the time when the EU patent is granted, the patent proprietor shall supply a translation of the claims into the official languages of the EU Member States other than the language of proceedings (Bulgarian, Czech, Danish, Dutch, Estonian, Finnish, Greek, Hungarian, Italian, Latvian, Lithuanian, Polish, Portuguese, Romanian, Slovak, Slovenian, Spanish, Swedish as well as the two working languages of the EPO other than the language of proceedings)<sup>56</sup>.

The following shall be published on the European publication server:

- the EU patent (claims, description and any drawing) in the language of proceedings, and
- the translation of the claims in the above twenty official languages of the EU Member States<sup>57</sup>.

##### *4.6.2. Analysis*

Contrary to the base-line scenario, this option would make the EU patent available, but it would result in high translation costs. The benefits of the EU patent as a single EU title would thus be counter-balanced by the losses resulting from high translation costs. Although only the translation of claims and not the whole patent would be required, such translations would still be needed into twenty official languages in the EU Member States.

Translation costs under this option would amount to 6 800 EUR per patent.

Stakeholders have unequivocally rejected the Council's common political approach of 3 March 2003 due to the unsatisfactory translation arrangements for the Community patent. The view of users, in particular SMEs, is clear – the EU patent would be too expensive for them. This is supported by the calculations in *Table 9* showing that the EU patent under this option would have higher translation costs than the current average European patent.

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<sup>56</sup> As Ireland and Malta do not currently require a translation of the European patent into respectively Irish and Maltese, it is assumed that they will not require a translation of the claims of the EU patent into their languages.

<sup>57</sup> The 2 working languages of the EPO other than the language of proceedings and 18 other official languages of the EU Member States.

Compliance with such translation requirements is not only very costly for the users, but is also very complex. A fixed time period would need to be set for the submission of such translations since only when all translations would have been filed could the EU patent take effect. Currently the EPC foresees four months for the submission of two translations of claims. It is clear that the translations should be provided as quickly as possible in order to fulfil their function for the dissemination of technology. However, twenty translations would require a longer period considering as well that many of the languages are relatively uncommon and the translation resources are limited. Users would be confronted with the management of these numerous translations, which would add additional costs and would make the EU patent even less attractive. Furthermore, decisions affecting the unitary character of the EU patent would have to be made, for instance for the situation where a translation into one of the EU official languages is not filed.

Presuming that the translations would be available very early (which, as explained, would be very burdensome for the users), patent information would certainly be more easily accessible in more European languages. Presuming that the EU patent would be at all used in case of such high translation costs, providers of professional services related to translations would also benefit, although this could raise questions over whether there would be enough specialised patent translators into certain languages.

*Table 8 – Expected impact of Option 4*

| Policy Option  | Users of patent system |      | Innovators in general | Patent information users | Professional services related to translations |
|--|------------------------|------|-----------------------|--------------------------|---|
|  | Overall                | SMEs |                       |                          |   |
| Option 4   | --                     | --   | -                     | +                        | ++  |
| Magnitude of impact compared with the base-line scenario: ++ strongly positive; + positive, -- strongly negative; - negative |                        |      |                       |                          |   |

*Table 9: Validation Costs under Option 4 – Cost Savings Compared to Baseline Scenario*

|   | Costs in EUR (for coverage in 27 Member States) | Costs of baseline scenario (for average patent covering only 5 Member States) | Costs of patent covering in 27 Member States under baseline scenario |
|---|---|---|--|
| Validation costs per patent                 | 6800  | 3400  | 24 000   |
| Application and validation costs per patent | 12400   | 8900  | 29500  |
| Total Validation Costs, if 60000            | 306 million (50% EU patents)                    | 204 million   | 1.44 billion   |

|  |  |             |              |
|--|--|-------------|--------------|
| patents are validated each year  | 357 million (75% EU patents)                                 |             |              |
| Total Application and Validation Costs, if 60000 patents are validated each year | 636 million (50% EU patents)<br>687 million (75% EU patents) | 534 million | 1.77 billion |

## 5. COMPARING THE OPTIONS

Table 10 below provides a summary of expected impacts of the analysed options.

*Table 10 – Comparing the impacts of the options*

| Policy Option                 | Users of patent system |      | Innovators in general | Patent information users | Professional services related to translations |
|-------------------------------|------------------------|------|-----------------------|--------------------------|---|
|                               | Overall                | SMEs |                       |                          |   |
| Option 0 (base-line scenario) | 0                      | 0    | 0                     | 0                        | 0   |
| Option 1                      | +                      | -    | +                     | -                        | --  |
| Option 2                      | ++                     | ++   | ++                    | +                        | --  |
| Option 3                      | ++                     | +    | ++                    | ++                       | -   |
| Option 4                      | --                     | --   | -                     | +                        | ++  |

Magnitude of impact compared with the base-line scenario: ++ strongly positive; + positive, -- strongly negative; - negative.

The analysis of Option 1 has shown that although this option may seem as highly simplified and cost-effective at first glance, it would result in difficulties for the users who have accustomed themselves to working in either German or French. By removing the flexibility of the current system enjoyed by many EU businesses, Option 1 could impact on the global competitiveness of European industry, especially for SMEs. The limitation to only one language is also inappropriate as it does not take into account the multilingual character of the future EU patent.

Option 2 would therefore be more appropriate as it maintains the procedural linguistic regime of the successfully functioning single pre-grant system provided by the EPC. Furthermore, this option is also cost-effective (minimum translation costs), simplified (similar to the current pre-grant stage with a drastically simplified post-grant stage) and legally secure.

Option 3 is equally simplified and legally secure as Option 2, but results in translation costs per unit that are twice as high. As demonstrated by the analysis, the total savings would also be significantly higher under Option 2 than under Option 3.

On the contrary, by requiring the translation of claims into all EU official languages, Option 4 would put considerable financial costs and risks on the users of the system. It would thus be neither cost-effective, nor simplified, nor legally secure.

*Table 11* below ranks the options as regards the objective to be achieved.

*Table 11 - Ranking the options*

|   | Option 1 | Option 2 | Option 3 | Option 4 |
|---|----------|----------|----------|----------|
| Simplified  | +        | ++       | ++       | -        |
| Cost effective  | +        | ++       | +        | --       |
| Legally secure  | ++       | ++       | ++       | -        |
| Magnitude of impact of the criteria compared: ++ strongly positive; + positive, -- strongly negative; - negative; |          |          |          |          |

## 6. MONITORING AND EVALUATIONS

The creation of an EU patent intends to improve the conditions for innovation in Europe. Innovation activity is measured by INNO-Metrics, comprising the European Innovation Scoreboard (EIS) and Eurobarometer. Patenting activity is one element used in measuring current innovation activity. In addition, while maintaining the target of investing 3% of GDP in R&D, the Europe 2020 Strategy commits to developing a new indicator to track innovation. This should take into account the creation of the EU patent and its take up between industrial sectors, businesses sizes and Member States.

The EU patent intends to coexist alongside the European patent and national patent titles. The relative patenting levels between these rights should therefore be monitored to ensure that these options are realistic for innovators according to their individual needs. This can be achieved by analysing patenting statistics published by patent offices in Europe in their Annual Reports. This will therefore provide further evidence of the effectiveness of the EU patent and the necessity for revision, either in the Regulation for the EU patent or associated instruments such as the fees, or for the Regulation concerning the translation arrangements.