Title:

Unified Patent Court Implementation - Unitary Patent

IA No: BISIPO005

Lead department or agency:
BIS - Intellectual Property Office
Other departments or agencies:

Ministry of Justice

Impact Assessment (IA)

Date: 26/03/2014 **Stage:** Consultation

Source of intervention: European

Type of measure: Secondary legislation

Contact for enquiries:

Katherine Evans

katherine.evans@ipo.gov.uk

Summary: Intervention and Options RPC Opinion: Amber

Cost of Preferred (or more likely) Option							
Total Net Present Value Business Net Present Value Net cost to business per year (EANCB on 2009 prices)		Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Measure qualifies as Two-Out?				
£0m	£0m	£0m	No				

What is the problem under consideration? Why is government intervention necessary?

The current system for obtaining and enforcing European patents is fragmented. All European patents granted by the European Patent Office (EPO) are today implemented as 'bundles' of national patents in each country, each only enforceable within national territories. The Unitary Patent will be a single patent right effective across all participating states. Currently, patenting across Europe is costly with many administrative burdens including high translation costs. The aim is to provide an alternative for those that want protection across a greater number of European countries with lower administrative costs. We propose some changes to the Patents Act (1977) to implement the Unitary Patent into UK law.

What are the policy objectives and the intended effects?

The Government's objective is to ensure compliance of UK law with the Unitary Patent and translations Regulations in national law when the Regulations come into force. Inventors will be able to apply to the European Patent Office for one patent for 25 Member States, using one application and one language regime, and then defend that patent in one common court system. The UK will benefit from being part of this single market for patents.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Option 1 – Do nothing

Option 2 – Make the necessary changes to ensure compliance with the Unitary Patent regulation in national law

Option 2 is the preferred option as it meets the policy objective of ensuring that UK law is compliant with Regulation (EU) No 1257/2012, in order to provide patentees in Europe with a less costly option for obtaining Europe-wide patent protection than is currently available.

Will the policy be reviewed? It will not be reviewed. If applicable, set review date: N/A						
Does implementation go beyond minimum EU requirements? No						
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base. Micro Yes Yes		< 20 Yes	Small Yes	Medium Larg Yes Yes		Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent) Traded: N/A Non-traded: N/A					ded:	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible SFLECT SIGNATORY	Date:
Signed by the responsible SELECT SIGNATURY	Dale

Summary: Analysis & Evidence

Description: Do nothing

FULL ECONOMIC ASSESSMENT

Price Base	PV Base	Time Period	Net Benefit (Present Value (PV)) (£m)				
Year 2014	Year 2014	Years	Low: Optional	High: Optional	Best Estimate: N/A		

COSTS (£m)	Total Transition		Average Annual	Total Cost
	(Constant Price)	Years	(excl. Transition) (Constant Price)	(Present Value)
Low	0		0	0
High	0		0	0
Best Estimate	0		0	0

Description and scale of key monetised costs by 'main affected groups'

No Change

Other key non-monetised costs by 'main affected groups'

BENEFITS (£m)	Total Tra (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0		0	0
High	0		0	0
Best Estimate	0		0	0

Description and scale of key monetised benefits by 'main affected groups'No Change

Other key non-monetised benefits by 'main affected groups'

Key assumptions/sensitivities/risks

Discount rate (%) 3.5%

BUSINESS ASSESSMENT (Option 1)

Direct impact on b	usiness (Equivalent A	In scope of OITO?	Measure qualifies as	
Costs: 0	Benefits: 0	Net: 0	No	

Summary: Analysis & Evidence

Description: Introduce Unitary Patent **FULL ECONOMIC ASSESSMENT**

Price Base	PV Base	Time Period	Net Benefit (Present Value (PV)) (£m)				
Year 2014	Year 2014	Years	Low: 0	High: 0	Best Estimate: 0		

COSTS (£m)	Total Transition		Average Annual	Total Cost
	(Constant Price)	Years	(excl. Transition) (Constant Price)	(Present Value)
Low	0		0	0
High	0	0	0	0
Best Estimate	0		0	0

Description and scale of key monetised costs by 'main affected groups'

We are unable to fully monetise the costs at this stage. We will be asking questions at consultation which should help inform us.

Other key non-monetised costs by 'main affected groups'

The main affected group for this legislative change will be those applying for patents. The Unitary Patent will operate in parallel with existing systems, and firms will use it by choice. It is expected that firms will use it to reduce their costs. There are no new processes or legal principles in the Unitary Patent, so adjustment costs to applicants and to patent attorneys should be small or nil.

BENEFITS (£m)	Total Transition		Average Annual	Total Benefit
	(Constant Price)	Years	(excl. Transition) (Constant Price)	(Present Value)
Low	Zero		Zero	Zero
High	Zero	7	Zero	Zero
Best Estimate				

Description and scale of key monetised benefits by 'main affected groups'

We are unable to fully monetise the benefits at this stage, we hope to gain greater insight into the benefits at consultation stage.

Other key non-monetised benefits by 'main affected groups'

The UP will provide savings to firms applying for patent protection across several participating countries in translation, administrative and renewal costs. For applicants who seek protection on a single invention in more than four or five countries the gains should be substantial. Availability of a patent right which can be used to launch an invention across most of Europe is intended to make it easier for firms to innovate across the single market. This should stimulate competitiveness and growth.

Key assumptions/sensitivities/risks

Discount rate (%) 3.5%

We assume that renewal fees will be set at a level to make the Unitary Patent a viable alternative to European bundle patents.

There is a risk that we have wrongly predicted business behaviour, meaning that we have incorrectly anticipated the switch from European bundle patents to Unitary Patents.

BUSINESS ASSESSMENT (Option 2)

Direct impact on b	usiness (Equivalent A	In scope of OIOO?	Measure qualifies as	
Costs: 0	Benefits: 0	Net: 0	No	

Evidence Base (for summary sheets)

Problem under consideration

The system for obtaining Europe wide patent protection is currently time-consuming and burdensome. Applicants can obtain individual national patents from each national patent office. Alternatively, a patent applicant may choose to apply for a 'bundle patent': this is granted by the European Patent Office (EPO) in a single procedure for up to 38 European states, but once granted, are treated as separate national patents, that incur various fees for each country. There are some procedures which are not consistent across Europe – particularly in some administrative processes such as the payment of renewal fees. This puts a financial and administrative burden on those wishing to hold a patent across Europe and makes Europe-wide patent protection more administratively complex and more costly than in other large markets (such as the United States).

Validation and Translation fees - Once the EPO has granted a European patent, the patent holder is required to validate the patent in each country in which they wish to market their invention. In some countries, validation entails payment of a validation fee, a fee for publishing the patent in the national register, and a fee for translating some, or all, of the patent. Many patentees choose to hire a patent attorney to help them navigate their way through these processes. Current translation costs to UK businesses seeking protection across Europe (in the 25 participating States) not including agent fees are about £20,000¹. These costs are relatively expensive and not competitive when compared internationally.

The European Commission 2011 impact assessment estimates that, "obtaining a patent in 13 Member States today costs 10 times as much as obtaining a patent in the US." They calculate that the 13-member state bundle patent costs £15,400 to obtain and the US equivalent costs £1,500. Of these figures, up to 40% of the costs can be attributed to direct and indirect translation costs. The cost in Japan is similar to that in the US, which suggests that obtaining a patent in the current bundle system is relatively expensive compared to similar markets internationally.

Renewal fees - patented inventions are protected for a maximum of twenty years from when the application was first filed. After grant, the patentee is required to pay annual fees for renewing their patent protection in each country they wish to market their invention. Renewal fees vary across Europe but to have protection across all 25 countries that have signed up to the Unified Patent Court Agreement patent owners would pay £125,000³ to renew their patent for a maximum of twenty years, compared to the cost of protecting their patented invention in the United States for twenty years which is a little under £8,000 (US \$12,600).4

Background on negotiations

After decades of negotiations, two EU Regulations were adopted on 17 December 2012 under enhanced cooperation amongst 25 EU Member States (Spain, Italy and Croatia are not currently part of the enhanced cooperation). Regulation EU 1257/2012 "implementing enhanced cooperation in the area of the creation of Unitary Patent protection" (the Unitary Patent Regulation) establishes the Unitary Patent. Regulation EU1260/2012 "implementing enhanced cooperation in the area of the creation of Unitary Patent protection with regard to the applicable translation arrangement" (the translations Regulation) establishes the language regime for the Unitary Patent.

Separately, the UK Government and 24 other EU Member States signed an intergovernmental Agreement in February 2013 establishing a Unified Patent Court for the settlement of disputes relating to Unitary Patents and European patents. This change is the subject of the BISIPO006 IA.

¹ Throughout this IA, any currency conversions are based on €1: £0.83, see Oanda Currency Converter: http://www.oanda.com/lang/de/

² European Commission IA, April 2011, 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, available at http://ec.europa.eu/ internal market/indprop/docs/patent/sec2011-482-final en.pdf, P. 24

^{3 2009} figures, European Commission IA, April 2011, ibid, P. 48

⁴ US Patent and Trademark Office fees at http://www.uspto.gov/web/offices/ac/qs/ope/fee010114.htm#maintain as of January 2014.

The entry into force of the UPC Agreement will trigger entry into force of the Unitary Patent and translations Regulations. The Governments of the 25 participating states made a joint declaration committing to bringing the new system into effect when they signed up to the Agreement in February 2013. In order for the Unitary Patent and translations Regulations to come into effect, it is necessary for 13 Signatory States to ratify the Agreement of which the UK, France and Germany must be included.

Rationale for intervention

The Government wants the UK to be part of a European patent system that can help innovative companies to get a return on their investment, encouraging further innovation. The Unitary Patent can support this aim by offering a cost-effective option for patentees that want to protect and market their inventions across Europe. Whilst there is a single market for goods and services within the EU, a uniform system does not exist for patents covering these same goods and services.

Currently not many patent holders choose to validate across 25 European states, despite the broad territory and large market that this presents. At the moment, the administrative costs and other fees act as a disincentive to those considering patenting across multiple European states.

The introduction of the Unitary Patent will remove some of the barriers to Europe wide patent protection mentioned above and simplify the process by which protection can be obtained. There will be a single renewal fee which will apply across all participating States. The regulation on the Unitary Patent (Regulation (EU) No 1257/2012)⁵ is accompanied by a regulation for translation arrangements (Regulation (EU) No 1260/2012)⁶ for the Unitary Patent which will reduce the translation requirements compared to that of European 'bundle' patents.

The commencement of the Unitary Patent regulation, and the accompanying translation regulation, comes into force when the Unified Patent Court (UPC) Agreement is ratified in 13 of the 25 Signatory States (which must include the UK, France and Germany).

Policy objective

The Government wishes to simplify the process by which Europe wide patent protection can be obtained and reduce the post-grant costs associated with maintaining protection across much of Europe to an appropriate level.

The Unitary Patent will offer UK patent-holders that want protection in the 25 European states that have signed up to the Agreement the choice to take out a patent that is more affordable than at present.

As part of the process, UK law needs to be compliant with the Unitary Patent and translations regulations and implement the provisions in the Unified Patent Court Agreement.

Options Considered

The options consider were:

Option 1 – Do nothing

Option 2 – Make the necessary changes to ensure compliance with the Unitary Patent regulation in national law

Option 2 is the preferred option as it will allow individuals and businesses in the UK to take advantage of the new Unitary Patent and reduce the administrative burdens and financial cost associated with current means of obtaining Europe wide patent protection.

⁵ REGULATION (EU) No 1257/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2012 implementing enhanced cooperation in the area of the creation of Unitary Patent protection, <a href="http://eur-lex.europa.eu/LexUriServ/LexUriSe

⁶ COUNCIL REGULATION (EU) No 1260/2012 of 17 December 2012 implementing enhanced cooperation in the area of the creation of Unitary Patent protection with regard to the applicable translation arrangements, available at http://eur-lex.europa.eu/LexUriServ/LexUriServ. do?uri=OJ:L:2012:361:0089:0092:en:PDF

Costs and Benefits of the options considered

Option 1 – Do Nothing

This is the baseline against which all other options will be compared.

Option 2 - Make the necessary changes to give effect to the Unitary Patent in national law

Costs and benefits

Although there are agreed principles on how the Unitary Patent will work, there are some factors which have not yet been agreed upon. We know that the fee structure for the Unitary Patent should cover the costs of administering the patent, and that there is a commitment to assist SMEs where possible. However we are unable to fully monetise costs and benefits at this time for two reasons:

- The costs of renewal fees are unknown at this stage and are being finalised by the participating states.
- At this time, we do not have information to suggest how many patent owners are likely to take up Unitary Patents and what factors drive this decision.

Given this, we cannot present definitive savings and have instead estimated potential savings using scenario analysis based on known costs of the existing system. Costs and benefits are presented on a per-patent basis rather than on an aggregated basis as volumes of demand are largely unknown. EPO research on factors driving patenting decisions is expected to deliver more evidence to inform this analysis going forward. The IPO has also commissioned research to explore factors influencing firms' choice over whether to choose a Unitary Patent over a bundle patent.

Preliminary findings from the IPO's research into business behaviours for the Unitary Patent show that businesses view the level of renewal fee as extremely important when considering whether to choose the Unitary Patent over a bundle patent. There are also different views depending on the industry, for example pharmaceutical companies are more likely to hold patents with coverage across the whole territory, whereas those in the ICT and engineering sectors tend to only select a limited number of states to patent in depending on their market. The research so far has also shown that uptake of the Unitary Patent will be influenced by opinions of the Unified Patent Court.

Who will be affected?

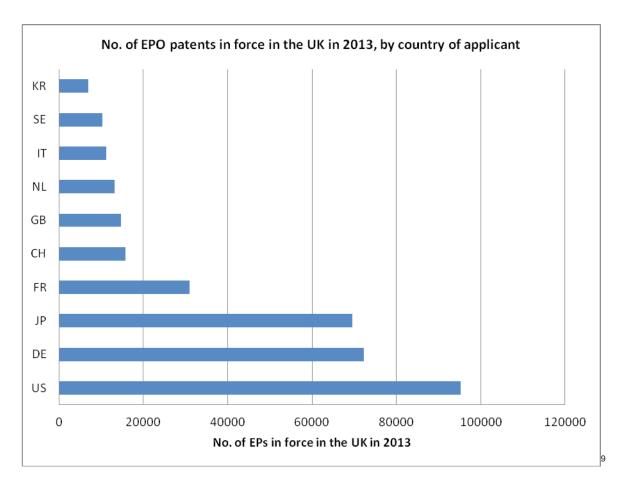
This will affect those who may be considering patenting in Europe. The maximum number of states taking part in the Unitary Patent is 25 (for a list, please see Annex A). However, currently not many patent holders choose to validate their patent in all of these 25 countries. We cannot say for sure, but cost and administrative burdens when compared to the advantage given by holding a patent in this market may have a bearing on the number of bundles which are held across all 25 states.

Currently, the most popular countries for validation of a bundle patent are Germany, France and the UK. The majority, nearly 70%, of bundle patents are validated in the UK. The UK-based applicants for bundle patents follow a similar pattern with Germany, France, the UK and the Netherlands being the most popular countries for validation of UK applications.⁸

We know that many patents valid in the UK are from outside Europe – as this chart shows, US and Japanese patent holders account for the first and third, respectively, most common applicant countries.

⁷ Data provided by the EPO to the Select Committee on November 7, 2014. The Netherlands is the fourth most popular country for validation of bundle patents with 25% of all bundle patents being validated there.

Data from internal IPO analysis of PATSTAT data of UK based applicants for bundle patents in the 25 member states from 1980 to 2011.



Direct and Indirect Costs to business

The Unitary Patent is entirely optional so businesses need not obtain this form of patent unless they choose to do so. Therefore, there should be no additional cost to those seeking patent protection as the current options (EPO bundle patents, national patents) remain available.

A bundle patent can be taken out for any combination of contracting member states of the European Patent Convention (EPC), and as the years progress, a patent holder can choose to cease renewing their patent in some, or all of the countries originally selected. This offers a degree of flexibility to businesses holding a large patent portfolio, and enables them to react to market trends.

Those opting for Unitary Patents cannot choose to cease renewing their patent in individual countries whilst continuing in others, as is currently possible with EPO bundle patents. Some patent holders may see this as a disadvantage due to the lack of ability to maintain the patent only where it is most desirable. However, the Unitary Patent is optional and current means of obtaining multi-country protection are still available, therefore we do not treat this as a burden on business. Businesses will only choose to use the Unitary Patent, and incur its potentially higher, less flexible renewal costs if there are other benefits.

Coverage of the Unitary Patent depends on which states the Unified Patent Court has jurisdiction in at the date the patent is registered for unitary effect. Whilst there is a maximum of 25 states signed up to the agreement, it is important to remark that the Unitary Patent will first come into being when 13 states have ratified the Unified Patent Court Agreement (to which commencement of the regulation is linked). This will likely mean that in the early years there may be some Unitary Patents which are only valid in 13 states; to gain coverage in further states at this point would mean validating in each of them separately – as with a bundled patent.

⁹ Data from internal IPO analysis of PATSTAT data of bundle patents valid in the UK in force in 2013.

Under the Unitary Patent, more patents might be held in countries where bundle patents are not currently validated. This increase in patenting potentially means that some future business activities will infringe Unitary Patents that would not otherwise have infringed because patentees would not have chosen to include that country in their bundle. The impact on the UK will be limited as the majority¹⁰ of bundle patents held in Europe include coverage in the UK. However, there is likely to be an increase in the number of patents valid in the UK. This increase will depend on the number of applicants favouring a Unitary Patent application over a bundle patent application.

Direct and Indirect Costs to the Intellectual Property Office (IPO)

Currently national patent offices collect annual renewal fees on European bundle patents valid in their territory and remit 50% of the fee revenue to the EPO. Under the Unitary Patent arrangements, the EPO will receive the renewal fees from patent owners. The EPO will retain 50% of the fee revenue and the remaining amount will be distributed to participating States in accordance with distribution arrangements to be agreed. Due to exchange rate fluctuations, whilst the proportion distributed by the EPO to the IPO may remain fixed, the value of the amount received may vary. The level of fees, deduction for administrative costs, costs related to the compensation scheme and the UK share will all affect IPO's income from the EPO. As these provisions have not been finalised, it is not possible to estimate any change in IPO revenue from EPO at this point.

There will also be costs to adapt and change procedures at the IPO. The IPO is undertaking a review of current practice in order to identify where procedures may need to be adjusted in order to account for the Unitary Patent.

Direct Benefits

Benefits to business - reduced translation costs

The proposed changes to UK legislation do not include any changes specifically relating to the translation regulation. However, by introducing the Unitary Patent UK applicants will be able to take advantage of the savings that the translation regulation will bring.

When dealing with applications for bundle patents, the EPO has certain translation criteria. The EPO requires that applicants for bundle patents file their patent specification¹¹ in English, French or German in order for it to be examined (this may be in addition to a copy in their native language). At grant, the EPO publishes the entire specification in one of its official languages (English, French or German) and translations of the claims into the other two official languages. For example, if a specification is filed in English then translations of the claims into French and German will be required. What is published at grant is the specification (description + claims) in English, plus the claims in French and German i.e.the description in English plus the claims in English, French and German. The applicant must provide the EPO with the relevant translations.

However when a bundle patent is validated in the chosen countries patent owners must follow national laws, which in some states requires supplying a translation of the entire specification into the local language. To some extent the administrative burden of translations was reduced by the introduction of the London Agreement¹² in 2008, which sought to reduce the required number of translations for a patent specification. However, not all countries in Europe have signed up the London Agreement, meaning that there are still places where a translation in to the local language of the whole specification is required (a full list is included in Annex B). Currently, some countries also charge publication fees (a table showing weighted fees charges in each of the 25 countries is available in Annex C)¹³. Exact costs vary depending on the country where validation is sought.

¹⁰ Recent figures provided by the EPO indicate 70% of bundle patent are validated in the UK. Early estimates, suggest this number is higher (75%), as in Harhoff, Dietmar & Hoisl, Karin & Reichl, Bettina & van Pottelsberghe de la Potterie, Bruno, 2007. "Patent Validation at the Country Level - The Role of Fees and Translation costs," Discussion Papers in Business Administration 2073, University of Munich, Munich School of Management:

[&]quot;In 2003, 95% of all patents granted by the EPO were validated in Germany (DE), 80% were validated in France (FR), and 75% in the United Kingdom (UK). Generally, smaller countries seem to be less attractive (i.e., the share of patents validated is smaller than 40%)."

¹¹ The specification contains all the technical detail of the invention and is made up of 'claims', which define the legal scope of what is protected; the 'description' which describes the invention in detail and commonly also includes some diagrams. The specification is made publicly available.

¹² The London Agreement came into effect in 2008, and resulted in reduced translation costs for patentees within Europe. However, it was not agreed by all Member States and so its scope has been limited. For more information see the EPO's page on the London Agreement – key points: http://www.epo.org/law-practice/legal-texts/london-agreement/key-points.html

¹³ Information on publication fees taken from The EPO's National law relating to the EPC September 2013 16th edition, available at http://documents.epo.org/projects/babylon/eponet.nsf/0/EE1929ACFAA82EC3C125725800374350/\$File/National law relating to the EPC en.pdf

The European Commission Impact Assessment¹⁴ concerning the Unitary Patent and the translation regulation estimates that a specialist translator charges approximately €85 (£70) per page. The Commission also identified that the average bundle patent has a specification made up of 20 pages (this includes the patent's claim which averages four pages, 16 pages of text giving the description, including a page with a diagram).

At the moment, if someone were to seek to validate their bundle patent in all 25 states which have accepted the Unitary Patent regulation and paid for translation and publication where required, the total that they would pay around €24,000 (equivalent to around £20,000)¹⁵.

Under the language arrangements for the Unitary Patent, the translation requirements for a patent specification written in English would be reduced to just translating the claims (on average only 4 pages) into French and German. Using the Commission estimate for specialist translator charges at €85 (£70) per page British patent owners seeking protection in 25 countries would therefore see their translation costs reduced to €680 (£560)¹6 under the Unitary Patent translation arrangements.

This represents a saving of approximately £19,400 against current translation costs for EPO bundle patents validated in all 25 member states. As mentioned above, the average UK owned EPO bundle patent is only validated in 4 countries (UK, France, Germany and the Netherlands) so savings against this baseline are lower – at just under £300¹⁷ per patent.

Transition costs

As provided for by Article 6 of the translation regulation¹⁸, there will be a transitional period of six years (potentially rising to 12) during which, if the Unitary Patent specification is written in English, a translation of the full specification is required in another official EU language. Also, as with the rules following transition, the claims are required to be available in English, French and German.

This means that for a UK patent owner the cheapest option would be for the full specification to be translated into either French or German (unless there is a business need for the specification to be translated into a different EU language) – fulfilling the requirement for the specification to be available in another EU language.

Since the specification (description + claims) would have been made available in English and one other official EPO language. a UK applicant would then only need to translate an additional four pages of claims into the remaining EPO official language. For example, say a patent specification is available in English the applicant could provide a translation of the specification (description + claims) into German and an additional translation of the claims into French. This would fulfil the requirements of having the claims published in all three EPO languages, and the need to file a translation of the full specification into another EU language in the transition period.

Thus, during the transition period the cost would consist of the translation of all 20 pages of patent specification (into French or German) (roughly £1,400¹⁹) plus the translation of 4 pages of claims (into whichever of French or German, the specification has not been translated into) (roughly £280). With an overall cost of about £1680, this reduces potential savings per patent validated in 25 countries to about £18,000²⁰.

Because many UK patent owners only validate in 4 countries (Germany, France, UK and Netherlands – which are all signatories of the London Agreement) the level of saving will be lower, because for a UK applicant filing in English their current costs are simply the translation of 3 sets of claims, which comes to £840 – with no requirement for a translation of the full specification. This cost of £840 is made up of the translation of four pages of claims into French and German to meet EPO requirements, and also a translation of the four pages of claims to meet Dutch national requirements.

¹⁴ European Commission IA, April 2011, ibid

¹⁵ This is based on paying the average translation fee of €85 for 4 pages of claims in 19 countries (€6460), plus 16 pages of description in 11 countries (€14960) (the countries requiring translated claims and translated descriptions are shown in Annex A), plus €2664 which is the total of all publication fees charged in the 25 states (details in Annex B). A summary of these numbers can be found in Annex C.

^{16 £560 = 2} times 4 pages at £70 (roughly equivalent to €680)

¹⁷ Current translation cost for UK, France, Germany and the Netherlands of £840 (3 times 4 pages at £70) less proposed £560 = £280

¹⁸ COUNCIL REGULATION (EU) No 1260/2012 of 17 December 2012 implementing enhanced cooperation in the area of the creation of unitary patent protection with regard to the applicable translation arrangements. Available at <a href="http://eur-lex.europa.eu/LexUriServ

^{19 20} pages at £70 = £1,400

^{20 £20,0000-£1,680 = £18320}

There are of course many who patent in more than the 4 most commonly validated states and that do not choose to validate their patent in all 25. The table below is to give an indication of the two extremes of translation savings for potential Unitary Patent users.

Table 1: Translation cost savings from the Unitary Patent in transition and final stage

Countries	Current Translation Cost	Transitional Period Translation Cost	Saving per patent in Transition	Final Period Translation Cost	Translation saving per patent Final Period
25 (in enhanced co-op)	£20,000	£1,680	£17,720	£560	£19,440
Germany, France, UK, Netherlands	£840	£1,680	-£840	£560	£280

In Table 1 above, the savings calculations do not include patent attorney fees, which may be incurred when providing a translation of a patent at validation. It is likely that owners of Unitary Patents will continue to seek patent attorney support when validating their patent and it is not yet known what they would charge. However as fewer translations are required and validation will only be with the EPO, rather than with multiple national offices, patent owners may see additional savings here.

Benefits to business – savings on renewal fees

Currently, the other significant costs currently facing patent owners seeking Europe wide protection is the cost of renewing their patent. Renewal fees vary around Europe and are generally progressive i.e. fees for later years are higher than those in earlier years. At the current exchange $rate^{22}$, it costs £10,900 to renew a patent for a maximum term of twenty years in Germany, which is similar to Austria (£10,200) and the Netherlands (£9,200). However, Germany's fees are more than twice the cost of renewing a patent for its full term in France (£4,700) and more than three times the cost of renewing a patent in Poland (£3,100). At the bottom end, Malta charges less than one fifth of Germany's price. In the UK, to maintain a patent for the full 20 years the total paid over that time is £3,300²³.

According to EPO estimates, the median length of time bundle patents are renewed for is approximately 11-15 years from the filing date.²⁴ Patent owners therefore pay approximately £46,200²⁵ for patent protection across the 25 countries for this median length of time. Those seeking protection for the maximum of 20 years, would face costs of approximately £125,000²⁶ for patent protection across the 25 countries. More valuable patents are more likely to be maintained for the maximum length and patent owners will have incentives to maintain these rights.

EPO statistics²⁷ also suggest that the average UK patent owner only validates their patent in 4 of the 25 participating member countries and pays £8,300 per patent in renewal fees for the median number of renewal years. To renew a bundle patent offering protection in the 4 most validated in countries for a maximum period of 20 years currently costs £28,000²⁸.

²¹ European Commission IA, April 2011, ibid P. 48

^{22 €1: £0.83,} see Oanda Currency Converter: http://www.oanda.com/lang/de/

²³ For consistency in international comparisons, the UK fees shown here are as of 2009; the current fee, as of 2013, is £4,550 and can be found at http://www.ipo.gov.uk/types/patent/p-manage/p-renew.htm

²⁴ See EPO National Law Relating to Fees: Payment of Renewal Fees, available at http://www.epo.org/law-practice/legal-texts/html/natlaw/en/vi/index.htm for fee levels of EPO member countries except Estonia, which has since introduced the Euro. Their Renewal fees taken from their Patent Office website at http://www.epa.ee/client/default.asp?wa_id=443&wa_id_key=

²⁵ Data provided by the EPO to the Select Committee on November 7, 2014

^{26 2009} figures, European Commission IA, April 2011, ibid, P. 48

²⁷ Data provided by the EPO to the Select Committee on November 7, 2014

^{28 2009} figures, European Commission IA, April 2011, ibid, P. 48

Table 2: Current fees (2009) for European Bundle Patents

	Length of renewal: 6 years ²⁹	Length of renewal: 10 years ³⁰	Length of renewal: 20 years ³¹	
For protection in all 25 states that are participating in the Unitary Patent	£7,000	£24,000	£125,000	
For protection across 90% of the market ³² in the states that are participating in the Unitary Patent	£4,000	£13,000	£75,000	
For protection in the top 4 countries where bundle patents are held (UK, France, Germany and the Netherlands)	£800	£4,000	£28,000	

Table 2, above, is designed to give an illustration of the level of renewal fees currently faced by those seeking to keep a European bundle patent renewed. As already explained, we cannot give an accurate prediction of the level of renewal fees for the Unitary Patent. When the level of fee has been agreed by the Select Committee we will be able to include a comparator for the Unitary Patent.

The Unitary Patent will not cover the whole territory of the EPC and so will not offer protection for those wishing to patent across the entirety of that territory; any countries additional to the Unitary Patent would form a bundle alongside the Unitary Patent.

Instead, the maximum number of states taking part in the Unitary Patent is 25 (for a list, please see Annex A). However, currently not many patent holders choose to validate their patent in all of these 25 countries. We cannot say for sure, but cost and administrative burdens when compared to the advantage given by holding a patent in this market may have a bearing on the number of bundles which are held across all 25 states. We would not expect the renewal fees for the Unitary Patent to be set at this level, as this would offer no cost-saving over a bundle which also covers the 25 states.

To achieve 90% market coverage (by population, of the 25 states participating in the Unitary Patent) a patent owner would have to patent in 10 states. As you can see, at the moment in order to capture the remaining 10% of the market someone would have to pay considerably more to gain coverage across all 25 states than for just 10.

What we know about Unitary Patent renewal fees

The pricing arrangements for the Unitary Patent renewal fees have not yet been decided, and will be set by the Select Committee (a committee of Member State representatives) according to criteria laid down in Article 12 of the regulation. As with renewal fees for EPO bundle patents enforced in the UK, the fees system for Unitary Patents will be progressive over the term of the patent.

^{29 85-96%} of bundle patents are maintained in the country of validation for 6 years based on Data provided by the EPO to the Select Committee on November 7, 2014.

^{30 56-79%} of bundle patents are maintained in the country of validation for 10 years based on Data provided by the EPO to the Select Committee on November 7, 2014.

^{31 14-21%} of bundle patents are maintained in the country of validation for the maximum length of 20 years based on Data provided by the EPO to the Select Committee on November 7, 2014.

³² By population, as according to 2009 Eurostat population numbers. Available at http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-QA-09-031/EN/KS-QA-09-031-EN.PDF

The criteria in Article 12 state that the renewal fee must cover the EPO's costs of granting Unitary Patents and of administering the patent. Article 12 of the Unitary Patent Regulation suggests that renewal fees for Unitary Patents shall be set to "reflect the size of the market covered by the patent" and would also be "similar to the average renewal fees for an average European patent", and also "equivalent to the level of the renewal fee to be paid for the average geographical coverage of current European patents"³³.

What kind of impact would renewal fees have on uptake of the Unitary Patent?

If patent owners made decisions on whether to switch between current EPO bundle patents and Unitary Patents on a cost-basis only, we might see the following: UK patent owners may be unlikely to choose Unitary Patents over bundle patents if renewal fees were set at a high level similar to the cost of renewing EPO bundle patent in 25 countries.

Additionally, British owners of EPO bundle patents with only four country validations would not save on renewal costs if Unitary Patent renewal fees are set at a level higher than the cost of renewal in four states. However they would make a translation saving in the after the transition period so the Unitary Patent may still be a desirable option. In the transition period, translation costs for Unitary Patents are higher than for a four-country bundle patent. During this period it would not be desirable to start taking out Unitary Patents if the patent holder is purely motivated by cost-savings.

Benefits to business - administrative savings

The ability to make a single payment to a single source to maintain the patent is likely to represent an advantage to patent holders choosing to renew across multiple states. The removal of some of the current hurdles in some countries will present a saving for those choosing to patent in those countries at the moment. Even simply arranging payment to 25 separate countries' offices incurs an administrative burden.

Indirect benefits

In addition to the direct cost savings to patent owners from the Translation and Unitary Patent regulations, there are potential indirect effects.

Potential for better access to finance and more innovation

Unitary Patents may be a more valuable asset than a bundle valid in just four countries. There may be greater marketing potential and greater opportunities for licensing use of the patented product. The broader geographic coverage would make it easier to innovate at scale. Owning Unitary Patents may therefore improve patent owners' balance sheets and increase the value of their assets, which in turn ease access to finance needed to fund R&D. EU wide protection at lower costs may make it easier for smaller innovators to grow, as they do in the US.

Those that are reluctant to patent in Europe because of perceptions of complexity of the system, or costs involved in seeking protection (through translation fees) and maintaining that protection (through the level of renewal fees in comparison to scope of the market) may change their minds. There is the possibility that patent owners from outside of Europe may see holding a Unitary Patent as a reason to increase their investment in the region through either manufacturing of the product, sale of the product or research and development.

Impacts on SMEs and micro-entities

Renewal fees present a greater burden for SMEs and micro-entities than for larger businesses as a proportion of their income. The Unitary Patent regulation recognises this: Article 12 of the Regulation suggests that when setting renewal fees, the situation of SMEs will be taken into account. However at this point negotiations on fees are ongoing.

Official Journal of the European Union, REGULATIONS REGULATION (EU) No 1257/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2012 implementing enhanced cooperation in the area of the creation of unitary patent protection. Available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:361:0001:0008:en:PDF

Risks and assumptions

Volumes of EPO bundle patents likely to switch to Unitary Patents

We caveat that our best estimate of the number of EPO bundle patentees likely to switch to Unitary Patents will vary, as it depends on the currently unknown price sensitivity of patent owners and the renewal fees to be agreed. Estimates may need revision as we learn more about how other factors may affect switching decisions. For instance, the Unitary Patent takes away the flexibility to remove countries in later years that the European bundle patent offers and this may mitigate cost advantages to switching to Unitary Patents. The EPO's Economic and Scientific Advisory Board (ESAB) has commissioned research to model the financial factors in the decision of a patent applicant to opt between EPO bundle patent and the Unitary Patent.

Furthermore we acknowledge that the introduction of the Unitary Patent, if reasonably priced, could also increase volumes of European patents beyond current levels i.e. new European patent applications will be filed beyond current levels of EPO bundle patent applications.

Level of renewal fees

Factors that will be taken into account during negotiations on renewal fees include SMEs, the size of the market that the Unitary Patent will cover, the influence the level of fee may have on facilitating innovation and competitiveness in European business, and the sustainability of fees (both application and renewal fees) in terms of ensuring that the EPO maintains a balanced budget.

Impact on SMEs and Micro Enterprises

The Regulation mentions that consideration will be given to SMEs when setting renewal fees. At present details of proposed arrangements are still unknown but any discounts given to SMEs will need to be recuperated through higher fees elsewhere to ensure the change is revenue neutral for the EPO. The levels of discounts awarded to SMEs are therefore likely to affect savings to be made by larger businesses.

Summary and preferred option

The preferred option is Option 2. This option bears zero costs on patent owners preferring to use the current system of national patents or EPO bundle patents but delivers up to £19,440 per patent in translation savings after the transition period, and we expect there to be some renewal fee savings for those seeking protection in the 25 member states participating in enhanced cooperation.

The average EPO bundle patent held by UK based owners is however only validated in 4 out of 25 countries, so this is arguably the more appropriate baseline against which to measure savings from switching to Unitary Patents. We estimate that option 2 could deliver £300 in translation cost savings per average patent. The renewal fee saving will be similarly limited. The Regulations for the Unitary Patent and the translation arrangements contain provisions to take into account SMEs but details have yet to be negotiated.

Direct Costs and Benefits to Business Calculations (following OITO methodology)

As the implementation of an EU Regulation this is out of scope of OITO.

Evaluation

This proposal is part of the implementation of an EU Regulation and as such will not be reviewed by UK Government. The EU Commission will review this policy.

Annex A - 25 participating states³⁴

Member State	Participation in the enhanced cooperation on the Unitary Patent protection	Signature of the Agreement on a Unified Patent Court	Ratification of the Agreement on a Unified Patent Court
	Yes	19.02.2013 ¹	07/08/2013
Belgium	Yes	19.02.2013 ¹	
Bulgaria	Yes	05.03.2013 ¹	
Croatia	-	-	
Czech Republic	Yes	19.02.2013 ¹	
Cyprus	Yes	19.02.2013 ¹	
Germany	Yes	19.02.2013 ¹	
Denmark	Yes	19.02.2013 ¹	
E stonia	Yes	19.02.2013 ¹	
Greece	Yes	19.02.2013 ¹	
H Finland	Yes	19.02.2013 ¹	
France	Yes	19.02.2013 ¹	
Hungary	Yes	19.02.2013 ¹	
Ireland	Yes	19.02.2013 ¹	
■ Italy	-	19.02.2013 ¹	
Latvia	Yes	19.02.2013 ¹	
Lithuania	Yes	19.02.2013 ¹	
Luxembourg	Yes	19.02.2013 ¹	
Malta	Yes	19.02.2013 ¹	
The Netherlands	Yes	19.02.2013 ¹	
Poland	Yes	No	
Portugal	Yes	19.02.2013 ¹	
Romania	Yes	19.02.2013 ¹	
Slovakia	Yes	19.02.2013 ¹	
Slovenia Slovenia	Yes	19.02.2013 ¹	
Spain	-	No	
Sweden	Yes	19.02.2013 ¹	
United Kingdom	Yes	19.02.2013 ¹	

³⁴ According to the European Commission Unitary Patent – ratification process as of March 26, 2014 available at http://ec.europa.eu/internal_market/indprop/patent/ratification/index_en.htm

Annex B

<u>Current translation requirements for an EPO patent written in English for validation in other EU states (allowing for take-up of the London Agreement):</u>

Country	Claims Translated?	Description Translated?
Austria	No*	Yes
Belgium	No*	Yes
Bulgaria	Yes	Yes
Cyprus	Yes	Yes
Czech Republic	Yes	Yes
Denmark	Yes	No
Estonia	Yes	Yes
Finland	Yes	No
France	Yes	No
Germany	Yes	No
Greece	Yes	Yes
Hungary	Yes	No
Ireland	No	No
Latvia	Yes	No
Lithuania	Yes	No
Luxembourg	No*	No
Malta	No	No
Netherlands	Yes	No
Poland	Yes	Yes
Portugal	Yes	Yes
Romania	Yes	Yes
Slovakia	Yes	Yes
Slovenia	Yes	No
Sweden	Yes	No
United Kingdom	No	No

^{*} Austria, Belgium and Luxembourg do not require further translations of the claims into their languages as they will have already been translated into French and German

Annex C - Breakdown of Translation and Publication Fees

Combined Translations and Publication Costs for the Average Bundle Patent

Country	Total Cost (€)	Total Cost (£)
Austria	€1,670	£1,386
Belgium	€1,360	£1,129
Bulgaria	€1,726	£1,432
Cyprus	€1,785	£1,482
Czech Republic	€1,780	£1,478
Denmark	€481	£399
Estonia	€2,050	£1,702
Finland	€690	£573
France	€340	£282
Germany	€340	£282
Greece	€2,050	£1,702
Hungary	€589	£489
Ireland	€35	£29
Latvia	€380	£315
Lithuania	€386	£321
Luxembourg	€0	£0
Malta	€0	£0
Netherlands	€365	£303
Poland	€1,749	£1,452
Portugal	€1,750	£1,453
Romania	€1,800	£1,494
Slovakia	€1,816	£1,507
Slovenia	€440	£365
Sweden	€502	£417
United Kingdom	€0	£0
Total	€24,084	£19,990

Description

New patent requires English plus one other full translation (assuming either French or German) plus claims into the remaining EPO language, at least initially.

The "average" patent gives each patent a "weighting" based on the % of EPO patents that were validated in that country for 2011 - so Austria 31.7% has a much higher weighting than, say, Poland (18.2% designation) to give an idea of a more "average" patent. This explains why some countries, particularly English language countries, will reflect very low to zero fees.

Language notes

Denmark, Sweden and the Netherlands have nominated English for description, therefore requiring translation if the patent is granted in French or German.

Denmark, Latvia, Lithuania, the Netherlands, Slovenia and Sweden require translation of the claims into their official language only (London Agreement).

During transitional phase, any patent in English has to be translated into one other EPO language fully, and the other's claims (in this case France (description) and Germany (claims) were assumed, the figures would be the same either way round).

Assumptions

The original patent was written in English

None of these languages are repeat translated

Agent fees not included

This refers to translations at grant only, therefore excluding translations that are requested of the proprietor at the start of legal proceedings

Source

Data represents translation and publication costs, weighted by the relative frequency of bundle patents in each country:

Translation costs are assumed at €85 per page, as per the European Commission 2011 Impact Assessment

Publication costs are from National Law relating to the EPC (EPO website): http://documents.epo.org/projects/babylon/eponet.nsf/0/

EE1929ACFAA82EC3C125725800374350/\$File/National law relating to the EPC en.pdf

Relative frequency of bundle patents validated from EPO website - 2011 statistics. Shows the number of patents with 2006 filing date that came into force as a proportion of the number that came into force in Germany.

Annex D - Glossary

Bifurcation

The questions of infringement and validity are separated and decided in separate actions.

Bundle patent

One of the national patents created following the grant of a European patent in the current European patent system – one bundle patent for each country designated by the applicant. In UK patent law, this is referred to as a European patent (UK).

Claim

A statement in a patent specification which legally defines the scope of protection for that patent – the area in which third parties cannot operate without infringing the patent.

Description

The part of a patent specification which outlines the technical detail of the invention, to allow a reader to understand that invention and be able to put it into practice.

Enhanced cooperation

A special procedure for a group of Member States within the European Union to make progress on more closely together within the structures of the European Union, in circumstances where not all Member States can agree on how to achieve an objective within the competence of the Union.

European Patent Convention (EPC)

An international agreement, signed in 1973 and substantially revised in 2007, which establishes the European Patent Office and sets out the operation of the European patent system. The Convention presently covers 38 countries, including nations which are not members of the European Union.

European Patent Office (EPO)

An international organization set up under the EPC, which administers the European patent system.

Infringement

When an act is performed without the consent of the patent owner, which is one which is within the exclusive domain of the patent owner, and for which there is no exception.

Intellectual Property Enterprise Court

Formerly the Patents County Court, it is in the Chancery Division of the High Court and deals with disputes relating to intellectual property, particularly those involving small and medium enterprises, where the overall value of the claim is relatively low.

Intellectual Property Office (IPO)

An executive agency of the Department for Business, Innovation & Skills, the IPO is the government body responsible for the national framework of intellectual property rights, comprising patents, designs, trade marks and copyright.

The London Agreement

An <u>agreement</u> associated with the EPC, which came into force in 2008 and relaxes the translation requirements for granted European patents, therefore reducing the associated costs.

Opt out

A provision in the Unified Patent Court Agreement which allows patent holders during the transition period to withdraw their patent (or Supplementary Protection Certificate) from the jurisdiction of the Unified Patent Court so that they remain in the jurisdiction of the national court for the life of the patent (or SPC), although they can be opted back in at any time.

Preparatory Committee

A group of representatives from the countries signed up to the Unified Patent Court Agreement, charged with setting up the Court, including establishing rules of procedure, identifying facilities, recruiting and training judges and administrative staff, amongst other responsibilities.

Renewal fee

A fee paid to by a patent owner to the patent office or other relevant authority in order for the patent to remain in force.

Revocation

The court or the relevant patent office can deem the patent (or the relevant part) never to have been granted if they are not valid.

Select Committee

A special committee of the EPO Administrative Council, established by the Unitary Patent Regulations, and charged with ensuring the EPO is able to carry out the various tasks given to it under the Unitary Patent Regulation.

Specification

The combination of the description, claims, and associated diagrams.

Supplementary Protection Certificates (SPCs)

These are provided for in European Union Regulations (1, 2) and extend the period of legal protection afforded to medicinal and plant products beyond the life of the patent relating to them for up to 5 years and 6 months.

Transition period

A period of 7 years (which may be extended by up to another 7 years) during which patent owners may continue to bring actions for infringement and validity of bundle patents and SPCs based on bundle patents before national courts. They can also choose to opt out a bundle patent or SPC from the jurisdiction of the Unified Patent Court during the period.

Unified Patent Court

International court, set up by the Unified Patent Court Agreement, which has exclusive jurisdiction over unitary patents when deciding issues of validity, infringement, and revocation.

Unified Patent Court Agreement

International agreement, signed by 25 countries in February 2013, which establishes the Unified Patent Court.

Unitary Patent

A single patent valid in all the countries signed up to the Unitary Patent Regulation; European bundle patents covering the same area are converted into a unitary patent after grant, upon request of the patent holder.

Unitary Patent Regulation

European Regulation 1257/2012, which sets out the goals and basic operation of the unitary patent, as well as the obligations of Member States signed up to the Regulation.

Validity

An action to determine whether a patent, or specific claims in the patent, should not have been granted because they did not meet the legal requirements at the time. Often used as a defence against infringement, since you cannot infringe a patent that is not valid.