

# **MEMORANDUM FROM RESEARCH COUNCILS UK (RCUK) TO THE CONSULTATION BY ANDREW GOWERS ON GOWERS REVIEW OF INTELLECTUAL PROPERTY**

## **Introduction**

Research Councils UK (RCUK) is a strategic partnership that champions the research supported by the eight UK Research Councils. Through RCUK the Research Councils are creating a common framework for research, training and knowledge transfer. Further details are available at [www.rcuk.ac.uk](http://www.rcuk.ac.uk).

This memorandum is submitted by RCUK and represents our independent views. It does not include, or necessarily reflect the views of, the Office of Science and Innovation (OSI). RCUK welcomes the opportunity to respond to this consultation on Gowers Review of Intellectual Property.

This memorandum provides RCUK responses to the main topics and questions identified in the consultation document.

## **The Research Councils and Intellectual Property**

The Research Councils positively encourage the exploitation of the results of the research they support, as a contribution to enhanced quality of life, sustainability and competitiveness of the UK.

The funding mechanisms operated by the Research Councils include intramural programmes (institutes or units in which a Council employs staff and owns and manages the exploitation of IP arising from their work) and grant support to Research Organisations (e.g. Higher Education Institutions).

In respect of grant-funding, unless stated otherwise, the ownership of intellectual property, and responsibility for its exploitation, rests with the Research Organisation. The Research Council may, in individual cases, reserve the right to retain ownership of intellectual property and to arrange for it to be exploited for the national benefit and that of the Research Organisation involved. It is the responsibility of the Research Organisation, and all engaged in the research, to make every effort to ensure that any potentially valuable results obtained in the course of the research are exploited, and that there is a suitable return to the Research Organisation and the researchers from any such exploitation. The Research Organisation must ensure that all those associated with the research are aware of, and accept, the arrangements for exploitation. Collaborative arrangements are expected to be put on a formal basis through an agreement covering the contributions and rights of the organisations and individuals concerning exploitation.

## **Questionnaire**

Responses to the questions are attached.

## GENERAL QUESTIONS

### 1. How IP is awarded

(a) Are there barriers to obtaining IP rights due to system complexity? What could be done to improve this situation?

The UK system is pretty straightforward. Obtaining foreign rights is more complicated. One difficulty is the uncertainty about the scope of rights possible, which is affected by case law and EU directives. It is both more expensive and slower to obtain a granted patent in Europe than in the USA. The long mooted 'Community patent' would both reduce expense and hopefully speed up the application process. Another potential benefit of an EU-wide patent would be to facilitate efforts to improve harmonisation between PTOs worldwide. We would support efforts to achieve a community patent system.

(b) How easy is it to find out about obtaining IP rights? What could be done to improve awareness for businesses and innovators? Is there sufficient awareness of the need to protect IP internationally?

This is relatively straightforward, although the UKPTO website could provide clearer guides expressed in lay terms. Patent agents would generally be consulted about anything specific. It seems to be well understood that IP rights overseas are necessary.

(c) Are there barriers to obtaining UK IP rights on grounds of cost? What drives these costs?

No. UK filings are inexpensive. Much more significant are patent attorney fees.

(d) How do these costs compare internationally in your organisation's experience?

Cheap, relatively. It is unusual not to go via the EP route for GB filings and the economies come as a result of number of countries covered.

(e) Do you have any comments on the UK Patent Office fees structure for obtaining and renewing IP protection?

None.

(f) Is lack of trust in the system a barrier? To what extent do you rely on other tools to bring innovation to the marketplace, such as being first to market, maintaining trade secrets, or using an open innovation model to generate value through reputation or network effects?

If this means a lack of trust that patents work, there clearly is a worry about protecting ideas using patents but releasing public information. The roles of PSREs and HEIs require that the research be made public so patent protection is vital. The other 'tools' are a very important stream of protection that may co-exist with patent protection. World-leading laboratories often have unique capabilities and often will be seen as 'the people to talk to'. Many of their licence deals are dependent on know-how and, increasingly, the cost of private research is so high that companies are willing to pay well for access to technology.

(g) Are there specific barriers to obtaining IP rights in your sector?

RC inventions cover a range of sectors (including physics, engineering, chemistry and biology). One issue is the relationship between academic research and collaborations and the protection of IP which requires scientists not to disclose information before considering the concomitant loss of IP rights. In addition, there is a perception among academics that there is a conflict between freedom to publish and the need to protect IP (although in fact any delays in publication that may be necessary to prevent disclosure before a patent application is made are relatively short).

(h) Are there specific barriers to obtaining IP rights for small businesses or individuals?

Cost of protecting IP rights is in issue. The system of infringement prosecution is expensive.

(i) How well does the national system for awarding IP, administered by the Patent Office perform? How well do the international and European systems work?

Our experience has not included, e.g., the office's arbitration schemes or other services. We are generally pleased with the speed and accuracy of the searches we receive from the UKPTO, although there have been occasions where the examiner has not understood the invention. Certainly, the speed is much better than EU and US (and especially the JP system).

**CCLRC propose this idea:** The search report is the first indicator of the quality of our filings and, as such, is often used (rightly or wrongly) to judge the likelihood of granted protection by investors. Sometimes the search report indicates a lack of understanding by the examiners. Before an 'official' report is issued we would like to have a way of discussing with the examiner, free of charge, the results of the search with the possibility of changing the end result, if appropriate.

## 2. How IP is used

(a) What types of IP does your organisation use and why?

Patents, copyright (mostly in software), know-how, design rights and trademarks. Patents are the cornerstone for RCs because we invent new technology. Copyright is important in software. Know-how is used because companies would often rather licence existing IP from us than develop their own technology in many sectors and a large part of that is our specific expertise. Designs are a large part of some RCs (e.g. CCLRC's) output, from mechanical hardware to silicon fabrication designs. Trademarks are not widely used because our technologies (and hence product, hence company, hence trading mark) tend to be early stage.

(b) To what extent do you seek multiple overlapping forms of IP protection?

As much as possible. The more there is the stronger the case when seeking funding/licensees.

(c) To what extent are these decisions influenced by sector-specific considerations?

The strategy is very dependent on end-use. For example, medical devices and diagnostics face such strong competition that robust IP is essential. Pharmaceutical R&D costs and timescales are very high so, again, robust IPR is essential. A novel X-ray device is unlikely to have more than one patent associated with it (but know-how and back-end electronics designs are important too).

(d) How does your company value its IP? Are there problems with raising finance against intangible assets based on IP? What improvements could be made in this area?

The same way any company values its IP – with large error margins. The tangible realisation of value is extremely hard to do. Most of our technology is early stage, so its ultimate value is determined to only a small extent by its IPR – a lot of work may be needed to develop a product. The most obvious value marker is in comparisons with existing products. In the UK, raising funding based on IP at early stages is hard to do. Most funders will set a nominal value – say £250K on the IP. It is very hard to affect that valuation without spending a lot of time and money internally first. For research organisations that has not been traditionally easy to do but it is being addressed by providing large sums of money to develop technology to the point of a better valuation.

(e) To what extent does the term of IP rights at the margin affect investment decisions?

The term of IP rights is much longer than many licensees would be worried by. Since our technology is early stage a patent might have 15-20 years left to run.

(f) How well does the UK IP system promote innovation?

The UK IP system is a small part of the picture in promoting innovation and comparable with or better than the rest of the world. Much more important is investment in people, research and businesses.

**Issue.** A big problem is finding prior art. There is no patent search system which is easy, convenient and accurate. Espacenet is poor. The UK patent office site could be better. We need a better searchable database that provides up to date information about which patents have been granted/withdrawn/lapsed/licensed to other parties. Available databases show

accurate information on filings, but do not remove 'dead' patents efficiently, or record grant information in a timely way. It is difficult to find out which filings are in force as all PTO website databases and commercially available patent databases are very out of date. This makes it very hard to assess whether there is freedom to operate.

(g) To what extent does your organisation make use of other methods used by Government to encourage innovation, such as public funding?

RCs are publicly funded. We also make use of DTI grants and other OST/DTI funding streams, e.g., in promoting knowledge transfer.

(h) Are data on the use of patents and other forms of IP useful as a means of measuring innovation?

There is a link between IP protection and the ability/desire of an organisation to innovate, particularly in companies. For PSREs, a core purpose is to innovate, and that was happening for many years before IPR became heavily used. Patents in particular are only really useful for innovation that may generate significant financial value. If the core purpose of the organisation is not to generate financial value through innovation then it becomes difficult to use IPR as a measure although it can be useful for judging a PSRE's willingness to innovate and as a comparison between like organisations.

(i) Do you have any evidence as to the static or dynamic costs that IP rights (as statutory monopolies) impose on the economy?

No

(j) Have you encountered patents or other IP rights being used defensively, i.e. obtained not to develop products, but only to prevent others from doing so? Under what circumstances do you consider this acceptable?

Not directly, but plainly this happens. Licence agreements (e.g. from RCs to companies) usually contain clauses designed to prevent companies "sitting on" IPR rather than developing them into useful products (e.g. milestones, termination provisions).

### 3. How IP is licensed and exchanged

a) How easy is it to negotiate licences to use others' IP for commercial or non-profit purposes?

Relatively rarely needed in our experience, but this has been relatively straightforward.

(b) What mechanisms do you use for finding potential licensing partners?

N/a

(c) How easy is it to use others' IP for research purposes? Have you experienced difficulty around research exemptions?

No difficulties.

(d) Are there specific barriers to licensing in the main forms of IP currently used: patents, copyright, trade marks, and designs?

Licensee and licensor need to know about each other! That can be a significant problem.

(e) Are there barriers to licensing IP on grounds of cost? What drives these costs?

In relation to in-licensing, we have much less. For out-licensing, the cost of licensing and licensing support is not factored into our practice currently, though that may change.

(f) Are there specific barriers to licensing IP in your sector?

N/a

(g) Does your organisation use methods to facilitate exchange of IP - such as cross-licensing or pooling IP rights with other firms or organisations?

Yes. Research is often a collaborative affair which necessitates the pooling of IPR.

(h) Are there specific barriers to licensing IP rights for small businesses or individuals - for example barriers to entry to patent pools?

N/a

(i) Are there barriers to trade and exchange of IP internationally?

Rights are different in different countries, particularly the US. Sometimes funding is dependent on IP being exploited in the country in which it was developed. E.g., DoE (US) and DTI funded projects.

(j) Does your organisation consider renewing patents using "licence of right" provisions in patent law (which entitle any person to a licence under your patent and reduce your renewal fees by half)?

No. For us there is no clear advantage in paying half the fees in respect of patents on which we would not be receiving.

(k) What could be done to improve "licence of right" provisions and business awareness of them?

N/a

(l) Do you have any experience of the compulsory licence provisions within current patent law? Are they effective? How could they be improved?

Interesting idea. No experience in practice.

#### 4. How IP is challenged and enforced

(a) Are there specific problems with enforcing the main different forms of IP: patents, copyright, trade marks, and designs?

Policing the IP usage. Cost of entry on an infringement case is extremely high.

(b) Are there barriers to challenging infringement and enforcing your IP rights on grounds of cost? What drives these costs?

Legal fees.

(c) To what extent does your organisation make use of other methods than litigation to resolve IP infringement cases, for example the Patent Office opinion service, mediation services, Alternative Dispute Resolution, or the Copyright Tribunal?

We have not done this much but tended to mediation.

(d) To what extent do you use IP litigation insurance? How effective is it?

Not done by RCs. There are issues with such insurance for a government body and there is a large due diligence barrier. Valuable IPis often licensed out at an early stage and the liabilities passed on to the licensee.

(e) Are there barriers to using such methods to settle IP disputes without recourse to litigation? How might they be removed?

N/A

(f) Are there specific barriers to challenging and enforcement of IP rights for small businesses or individuals?

Cost, complexity, consequences of failure, low benefits to success,

(g) To what extent is the risk of litigation a factor in your organisation's investment in innovation?

N/a

(h) What are the principal barriers to efficient and successful challenge and enforcement internationally?

## SPECIFIC ISSUES

- **Current term of protection on sound recordings and performers' rights**
  - (a) What are your views on this issue?
  - (b) Is there evidence to show the impact that a change in term would have on investment, creativity, and consumer interests?
  - (c) Are you aware of the impact that different lengths of term have had on investment, creativity, and consumer interests in other countries?
  - (d) Are there alternative arrangements that could accompany an extension of term (e.g. licence of right for any extended term)?
  - (e) If term were to be extended, should it be extended retrospectively (for existing works) or solely for new creations?
  
- **Copyright exceptions - fair use / fair dealing**

Background: There are a number of exceptions to copyright that allow limited use of copyright works without the permission of the copyright holder.

  - (a) What are your views on the current exceptions in copyright law?
  - (b) Could more be done to clarify the various exceptions?
  - (c) Are there other areas where copyright exceptions should apply?
  - (d) Are the current exceptions adequate or in need of updating to reflect technological change? For example copyright law in the UK does not currently have a private "fair use" exception. Such an exception might allow individuals to copy music CDs onto their PC and MP3 player for their personal use. Should UK law include a statutory exception for "fair use"?
  - (e) How would you see content owners being compensated for such use?
  - (f) To what extent has technological change presented difficulties in use of copyrighted material in the field of education?
  - (g) Are there issues concerning the archiving of material covered by copyright?  
**Would very much welcome exceptions allowing fair use for consumers.**
  
- **Copyright – digital rights management**

Background: Increasingly digital media content is distributed with digital rights management (DRM) technologies that can enable rights-holders to track usage and prevent unlicensed copying by technological means. However concerns have been raised about interoperability and that such technologies may impair the content consumer's legal rights. For example they may be unable to take into account exceptions to copyright, the ultimate expiry of copyright term, or the future evolution of technology. They may therefore undermine legitimate rights to access digital content, now and in the future. (NB: We are aware of all formal submissions that have been made to the All Party Parliamentary Internet Group on this issue.)

  - (a) Do you have a view on how the use of digital rights management technologies should be regulated?

**Interoperability between the main standards is the main concern.**
  
- **Copyright – orphan works**
  - (a) Have you experienced any difficulties in identifying the owners of copyright content when seeking permission to use that content?
  - (b) Do you have any suggestions on how this problem could be overcome?
  
- **Copyright - licensing of public performances**

- (a) Have you encountered problems with the system of licensing and paying royalties to collecting societies for public performance of music and/or sound recordings?
- (b) Could the system be clarified or simplified, and if so how do you see this working?

- **Patents – utility models**

Background: Some countries, notably Germany, have a “utility model” system offering protection for simple inventions, usually subject to less examination and shorter terms than standard patents.

- (a) Do you have a view on some sort of second tier patent system?
- (b) Has your organisation encountered problems in protecting its IP internationally where such systems exist?

The patent system should focus on top-level inventions. In countries where the barriers for inventiveness and novelty are reduced (primarily the USA) the patent system becomes difficult. The US system is so powerful it changes business models. The US patent system has too low a barrier to obtaining IP protection in some cases leading to, e.g., software patents.

- **Pharmaceutical Supplementary Protection Certificates (SPCs)**

Background: SPCs are a “sui generis” IP right available in EU Member States for pharmaceutical products (as well as plant protection products). The standard patent term is 20 years. SPCs aim to compensate rights holders for the time required to obtain regulatory approval for their products. Where regulatory approval is issued more than five years after a patent is granted, SPCs may be granted to extend the term of protection on the active ingredient in the patented product. SPCs last for a term corresponding to the period elapsed between the five-year point and the point at which the product reaches market, up to a maximum term of 5 years.

- (a) Does your organisation use SPCs?  
No
- (b) How fair and effective are they in delivering an incentive for investment?
- (c) How could they be improved?
- (d) Should the term of SPCs be more flexible - perhaps relating straightforwardly to the period between patent award and regulatory approval?

- **Trade Marks – international issues**

- (a) To what extent does your organisation register its trade marks at the European rather than national level?

EU system offers better value internationally.

- (b) Could the UK trade mark system be improved to work better alongside the European system?

- **Designs – registered designs and unregistered design rights**

- (a) To what extent does your organisation rely on registered designs? And on unregistered design rights?
- (b) To what extent does your organisation register its design at the European rather than national level?
- (c) To what extent does your organisation rely on the European unregistered design right rather than the national UK unregistered design right?
- (d) Could the UK registered design be improved to work better alongside the European system?
- (e) Could the UK unregistered design right be simplified to work better alongside the European unregistered design right?
- (f) Do you see a useful role for the UK unregistered design right alongside the European design right?

- **Legal sanctions on IP infringement**
  - (a) Are you aware of any inconsistencies or inadequacies in the way the law applies legal sanctions to infringement of different forms of IP or to different circumstances?
  - (b) For example, should criminal sanctions on online infringement be the same as those relating to physical infringement?
- **Coherence between competition policy and IP policy**
  - (a) Has your organisation experienced any activity linked to IP rights that you regarded as unfair competition?
  - (b) How did you deal with this problem?
  - (c) Was competition law effective at controlling this behaviour?
  - (d) Should competition law have a greater role to play in regulating IP?
  - (e) How would you see the system working?
- **Parallel Imports / International Exhaustion**

Background: European law does not allow firms to use trade mark or copyright law to prevent their goods sold in one EEA Member State from being imported and resold in another Member State – i.e. they are not able to segment the EU market. However European law does allow the use of trade mark and copyright law to restrict the imports to EU Member States of goods sold outside the EEA. It also specifically inhibits EU Member States from legislating to remove such import restrictions at the national level – so called “international exhaustion” of trade marks or copyright. There has been a good deal of debate, both here in the UK and at EU level, about the costs and benefits of removing restrictions on parallel imports. There is a further issue of firms taking advantage of variations in prices on pharmaceutical products across the EU and repackaging drugs bought cheaply elsewhere within the EEA to resell within the UK.

- (a) Has your company been affected by parallel trade?
- (b) What would be the impact on your organisation of a change in the current rules?
- (c) What evidence is there of the costs and benefits, both for consumers and firms of the current rules?