

Gowers Review of Intellectual Property

Submission from the Open Rights Group

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Introduction

The Open Rights Group pursues specific objectives to:

- Preserve and extend traditional civil liberties in the digital world
- Raise awareness in the media of digital rights abuses
- Provide a media clearinghouse, connecting journalists with experts and activists
- Nurture a community of campaigning volunteers, from grassroots activists to technical and legal experts

We wholly support the aims of this review and wish to commend the Treasury and the Gowers review team for undertaking this complex and difficult procedure on behalf of the United Kingdom.

In addition to producing our submission, the Open Rights Group has also created a website - <http://gowers.openrightsgroup.org/> - where the public can comment on each section of the call for evidence. The site is still active and drawing many high quality comments from the public, particularly on the subject of phonographic copyright term extension. The site will stay open to comments from visitors until the Gowers Review publishes its report. We would like to invite the Review to visit the site and read through some of the discussions there.

We would now like to make specific recommendations for actions that would improve the efficacy and equity of UK intellectual property policy. We would be pleased to provide further information on any of these recommendations at the request of the review.

1. Place greater emphasis on evidence and the public interest

Current IP policy-making is often biased by asymmetries in the power of different stakeholders. On one side, the beneficiaries of highly protectionist IP policies are frequently large companies, able to act relatively cheaply, and in concert with each other, to articulate their agenda and influence policy. By contrast, those who would benefit from a liberalisation of IP law are generally unable to present their point of view: the general public both now and in fifty years time, future innovators and artists, and consumers en masse.

It is this second group that we feel the government has an obligation to represent as a part of its wider duty to represent the public interest, an interest which can often be contrary to the demands of entrenched right holders. The presumption of rights holders that UK government policy should promote the interests of the IP industries is misplaced.

We therefore strongly support the adoption of Item 9 of the Royal Society of Arts' *Adelphi Charter* [1], which states:

In making decisions about intellectual property law, governments should adhere to these rules:

- There must be an automatic presumption against creating new areas of intellectual property protecting, extending existing privileges or extending the duration of rights.
- The burden of proof in such cases must lie on the advocates of change.
- Change must be allowed only if a rigorous analysis clearly demonstrates that it will promote people's basic rights and economic well-being.
- Throughout, there should be wide public consultation and a comprehensive, objective and transparent assessment of public detriments and benefits.

The *Adelphi Charter* emphasises the need for evidence-based policy as well as the requirement that the burden of proof be placed on those who lobby for more extensive monopoly rights, whether in the form of broader scope, longer terms or more stringent enforceability. In our view it is clear those who seek more extensive monopolies must be able to adequately demonstrate that the benefits of such a change to society

as a whole outweigh the costs. It should not fall to those who wish to resist such extensions to prove that the changes will be damaging.

2. Improve the quality of evidence on long-term effects

While the aims of the Gowers process are commendable, we are concerned that the challenges of negotiating a wide-ranging and systematic review in such a short time may unwittingly bias the evidence in favour of large copyright holders. The scope of the review is broad: the complexity of some of the issues addressed, such as term extension and orphan works, merits detailed examination (and has prompted such in other jurisdictions). While expansive, the review also omits some key considerations, such as the place of Crown Copyright and public sector information (PSI) in policy, whose effects have an indirect but significant impact on the topics under consideration.

Given the importance of innovation and creativity to UK society we feel it especially important that the review board maintain a commitment to evidence-based policy. The issues are complex and fast-changing, and will continue to be vital to the health of the UK's knowledge economy, and it is essential that, in a rush to report, careful consideration of evidence and theory is not left behind and replaced by the uncritical acceptance of the claims of one group or another. For many of these areas evidence-based policymaking requires commissioning of proper peer-reviewed research provided with adequate time and resources.

It is worth noting that relatively little independent research has been pursued in any country. The United States has some independently funded academic groups, such as Duke Law School's Center for the Public Domain and the Berkeley Center for Law and Technology. An impartial research project or set of projects, undertaken by universities in the United Kingdom, would do much to both clarify UK policy choices, and improve the position and power of the UK in the wider international circles where IP policy is often finally determined.

3. Protect balance of IPR against contractual over-protection

It is common practice for rights holders to reinforce IPR through licensing regimes. This can result in over-protection of works and lead to the dilution of rights implicitly granted by Parliament. This is unacceptable where licence agreements (or their technological enforcement) prevent users from exercising statutory exceptions and limitations. This often occurs in the digital environment, where so called 'click-wrap' contractual agreements, where the user has to agree to non-negotiable terms and conditions before they can continue, and End User Licence Agreements (EULAs) dominate.

Such abuses have been highlighted in particular by the British Library, who report difficulties in archiving and making content available to the disabled. For example, e-books are restricted using a combination of technological and contractual protections that amount to a level of private regulation that disregards users' statutory rights. Typically restrictions are imposed on the duration of access, or on the number of views, or even on the devices that can be used. For example, a literary work may have entered the public domain but still be distributed in such a way that prohibits use.

In response to this imbalance between the interests of competing groups, two options appear appropriate. Firstly, the government could develop inalienable statutory mechanisms which protect the user's ability to exercise exceptions to monopoly rights. Secondly, where identifiable detriment is caused to users of IP, without reasonable justification provided by the content provider, such terms could be rendered void by the exercise of a public interest test.

4. Reject calls for an increase in the term of protection of sound recordings and performers' rights

We believe there should be no extension - retrospective or prospective - of the term of protection on sound

recordings and performers' rights. Such an extension, particularly where retrospective, would impose significant cost on society as a whole and lacks any sound economic justification.

A copyright is a monopoly granted for a limited time in order to increase the supply of creative works by improving the remuneration of those who produce them.

Copyright inevitably has associated 'deadweight' losses such as higher prices and 'transaction' costs, including the cost of locating works, locating the owner(s) of their copyright, contracting with them, distributing monies etc. This restriction operates both on those who wish to enjoy the work in itself as well as those who wish to reuse it as part of a new creative work.

When considering copyright - and in particular its term - we, as a society, should incur these costs only when they are outweighed by the benefits we receive in the form of new creative works. As Macaulay put it just over one hundred and fifty years ago: "It is good that authors should be remunerated, and the least exceptionable way of remunerating them is by a monopoly. Yet monopoly is evil. For the sake of the good we must submit to the evil: but the evil ought not to last a day longer than is necessary for the purpose of securing the good."

Retrospective term extensions are extensions of the monopoly protection for works already in existence. The incentive to produce these works was clearly in place fifty years ago. Giving Elvis Presley an extra fifty years of copyright today cannot provide him with an incentive to produce new works in 1955. Rather, this provides a windfall to the record companies who made their investments half a century ago in full knowledge that the fruit they bore would belong to the public fifty years later.

Retrospective term extension will also do nothing for today's artists who have already created works. The benefits to artists of extra payments fifty years from now are negligible -- there is no entrepreneur, artistic or otherwise, whose business-plans are shaped by events that will not come to pass for over half a century. Therefore, the promise of possible additional revenue created by increased copyright term on existing works will not induce the creation of new works.

For further discussion of this please see Appendix 1: *Retrospective extensions will not increase funding of new work.*

Prospective term extensions are extensions that only apply to works created after the extension came into effect. While prospective extensions do fit within the logic of copyright, the term of protection for recordings is already so long that the incentive effects of an extension would be negligible. With the term of protection already at fifty years any extension will result in extra income so far in the future that its present value to the producer of a work will be so insignificant, at least compared to what they would already receive, as to have no effect upon the creation and funding of recordings.

Copyright term extensions would reduce, yet again, the size of the public domain, harming public access to old material, the preservation of materials on physically fragile media (such as old shellac disks) and the creation of new works that build upon the past. The only beneficiaries will be the owners of a very limited number of valuable back-catalogues - the majors and a handful of lucky performers - who will receive windfall gains at the public's expense. Such a move would clearly be against the public interest.

The effect of a term extension for copyrights on phonograms is economically indistinguishable from a direct payment from the British Exchequer to the industry, a scheme which we believe would be unlikely to receive warm support from either the government or the taxpayer. After half a century's patient waiting, it is high time for these works to enter the public domain as the public realises its side of the copyright bargain.

5. Reform and clarify copyright fair dealing exceptions

The current structure of copyright exceptions is unclear, poorly understood and increasingly anachronistic in the digital age. Their function and comprehension must be improved, starting with simplification and then moving on to the recognition of further categories of exceptional activities.

A new statutory exception for personal, private copying is long overdue. Moving purchased content between digital devices is today seen as a 'right' by the general public; the media and technology industries already profit from this accepted practice. Just as UK copyright law accepted the right to time-shift television programmes, so a wider right to personal private copying would place legislation and common practice on a firm footing.

The amount of material stored digitally is increasing exponentially, together with reliance on this data by the commercial and academic sectors. A statutory exception for archiving processes is necessary to ensure that valuable materials are neither lost nor cloistered away in outdated formats. For example, the law previously accepted backups for software, but since the EU CD this important practice has been thrown into a legal grey area.

In general, the dilemma that 'making a copy' is both the key act in copyright enforcement and a trivial but necessary function in a wide range of useful, but non-exploitative digital processes, should be addressed.

Rather than attempt to address these issues and others in a piecemeal legislative approach, we recommend that an investigation be made into whether the UK should adopt a non-exhaustive approach to fair-dealing, originally recommended by the Whitford Committee in 1977 (in the publication *Copyright and Designs Law: Report of the Committee to Consider the Law on Copyright and Designs*), and similar to that of the United States, where new uses can be accommodated without recourse to specific legislative amendment.

The Australian and Hong Kong governments are undertaking ongoing research into this type of reform, and their delineation of factors that might make up such a quantitative test may provide a useful guide to implementing such a change in the UK.

6. Rebalance law on Technological Protection Mechanisms

Our full opinion on Digital Rights Management was presented to the All-Party Parliamentary Internet Group's public inquiry in February 2006, and is attached in Appendix 2. The points below summarise our position:

- DRM distorts traditional tradeoffs in copyright law by providing a mechanism for right holders to restrict the way in which works are used, over and above the limitations set down by copyright law.
- New types of content sharing licenses are at risk if DRM becomes widespread, as DRM systems may prevent the public from accessing materials released under these alternative licenses.
- The law should require that all media producers deliver works in the clear, i.e. without any DRM, to copyright deposit libraries.
- All DRM will eventually become outdated, thus preventing access to restricted media, and users should be allowed to circumvent any DRM when this occurs.
- The law should provide an immediate right of action for any disabled people to circumvent DRM systems in the process of accessing the media for their own consumption.
- Content already has copyright protection. Legal penalties for DRM circumvention go beyond what is required for the enforcement of copyright and create many negative side-effects.
- DRM systems can and do have serious negative effects on computer functionality. Causing this should qualify as an offence under the Computer Misuse Act.

7. Improve public access to orphan works

Difficulties in identifying rights holders can significantly hinder both commercial and non-commercial

projects, and the difficulties created by orphaned works are significant both in terms of time spent and costs incurred.

We recommend further research to determine a viable, fair and affordable solution. This research should consider a number of options, including the possibility of a return to some form of copyright registration. The obvious advantage of registration is simplicity for those seeking permission for a subsequent use. A peppercorn fee might be levied on registration to subsidise the growing costs of enforcement. This small administrative burden imposed on rights holders is in line with our policy of reducing costs of the copyright system on the public purse.

Another option deserving of research is a system for licensors to deposit payments where they have made all reasonable efforts but failed to locate the relevant right holder. A combination of these approaches has been developed for legislative review in the US [4],[5], and is favoured for helping revitalise the public domain whilst placing only a light tax burden on the public. We reiterate that right holders and other beneficiaries of the copyright system should bear its administrative burdens, not the general public.

8. Provide for proportionate sanctions for IP infringement

As the cost of making copies of works has decreased and the ability to do so has spread throughout society, so the state has taken up its share of the increasing costs of enforcing statutory IP protections, even when the act of copying has had little effect on the market or the alleged victim.

Perhaps the best example here has been the pursuit through the courts by rights holder groups of individual Internet file-sharers. Each of these file-sharers has contributed only a small part to the wider issue the rights holders seek to address; nonetheless these industries have largely externalised the cost of creating a disincentive, by leading each individual case through the courts. This practice has only recently begun in the United Kingdom. If the longer American example is any indication, this cost to the public purse will only continue. Over 18,000 cases by the RIAA and MPAA have now been conducted. Anecdotally the music industry's streamlining of this process, and the large figures demanded as settlement, allow them to break even or profit from their practice, while their actions still clog the courts and takes up valuable judicial resources.

Generally, the content industries have taken the position that such enforcement is necessary, and if anything, the public portion of the cost of enforcement must be increased through the criminalisation of infringement. The EU IPRED directive in Europe, and the proposed Intellectual Property Protection Act of 2006 in the United States both call upon government to increase the level of criminal prosecution in IP enforcement, so that the costs to civil litigants might be reduced. (See the *Rise of Statutory Protection, Expanding the Market's Role in Advancing Intellectual Property* [2]).

What is needed is a clear line to be drawn between large-scale commercial infringement industry, which makes copies in order to fraudulently sell a work as a bona fide original; and the incidental 'infringement' practiced by individuals which in some cases could be viewed as fair dealing, and in others is a result of ignorance on the part of individuals as to the extent of their action.

In the first instance, where IP industries are faced with a parallel black market in their goods and which consumers are being actively deceived, a strong case can be made for vigorous government prosecution. In the second instance, however, the enforcement costs that the companies are attempting to pass on to the public sector are large, but with little potential return for either the industry or the public as a whole.

Making a clear division between these two cases is not, sadly, in the rights holders' interests, as conflating the practices of black-market 'pirates' with the practices of individuals provides them far more political purchase when making arguments that restrict consumer or competitors' rights. So, for instance, in the United States, Attorney General Gonzalez referred to the profits of piracy sponsoring terrorism in introducing legislation that would make even attempting infringement a criminal offence.

Similarly, in attempting to criminalise patent infringement in the European Union, advocates of the Intellectual Property Enforcement Directive (IPRED2) neglect to point out that many groups infringe on patents not because of malicious intent, but because they are unaware of the patents' existence or applicability. And rights holders of all industries call upon government repeatedly with claims of billions of pounds worth lost to piracy without considering whether each copy made is a sale actively lost.

When providing for the proportionality of sanctions against IP infringement, we should weight objectively not just the losses to IP industries, but the cost to the exchequer of enforcement, and whether the infringers themselves are reducing the profits of the rights holders and society as a whole. The balance of investment in intellectual property rights is not evenly distributed through society; it is only just that major rights holders should bear a burden of enforcement proportionate with the benefits they accrue.

In addition, laws cast as positive defences of intellectual property, such as the criminal prosecution of anti-circumvention provisions, have had profound collateral effects in other sectors (See *Unintended Consequences: Seven Years under the DMCA* [3]).

It is these costly externalities which should act as the strongest brake on increasing sanctions against infringement, and indeed, the ratcheting expansion of intellectual property rights as a whole. Proportionality in sanctions should not simply be proportional to the desire of the wronged party, but proportional to the disincentive effect of the punishment on the wider society. If, for instance, we punish innovation in technology by raising the costs of software patents liability, or we punish innovators in technology by passing anti-circumvention statutes that forbid them from investigating competitors' products, we have created a net loss, no matter how more powerful our new property rights might seem.

References

- [1] *The Adelphi Charter*, RSA, http://www.adelphicharter.org/adelphi_charter_document.asp
- [2] *Rise of Statutory Protection, Expanding the Market's Role in Advancing Intellectual Property*, Competitive Enterprise Institute, <http://www.cei.org/gencon/016,04454.cfm>
- [3] *Unintended Consequences: Seven Years under the DMCA*, EFF, http://www.eff.org/IP/DMCA/?f=unintended_consequences.html
- [4] *Orphan Works Report*, US Copyright Office, <http://www.copyright.gov/orphan/>
- [5] *Proposal for Registration of Orphan Works*, Larry Lessig, <http://www.lessig.org/blog/archives/20060306-lofgren.pdf>

Appendix 1: Retrospective extensions will not increase funding of new work

It is often argued by proponents of retrospective term extensions that such a change would increase the funding of new work by allowing labels to make extra money on their existing catalogue.

This argument is, however, entirely fallacious for the simple reason that:

- a) A retrospective term extension increases the return to past projects but makes no difference to the expected payoff of new projects.
- b) Investment in new projects is determined by their expected payoff alone.

Thus a retrospective term extension -- which only affects returns on works already created -- will have no effect on the level of investment in new work. Given the superficial plausibility of the fallacy it is worth elaborating a little upon these points.

In the (popular) music industry, just like many others, investors (record labels) invest a variety of risky projects (bands). Some projects will be successful and some will not. As in any business, investors will, in general and on average, invest in a project if its expected profit is positive.

This does not mean a given project will make money, in fact quite the contrary. Many projects, perhaps the majority, will lose money but the losses on these will be made up for by the successful ones so that on average an investor makes money (averaged over the portfolio). In the music business, which is relatively risky, this is exactly the case. Most bands fail but a few are highly successful and return a large amount of money to the label.

Thus while successes do, in some sense, help to pay for failures this is only true prospectively - if one knew in advance which projects would be failures one would not invest in them. Making more money (or less money) on existing projects makes no difference. This distinction is the one between cross-subsidy and diversification.

Cross-subsidization in this context is taken to denote intentionally using profits from one area to fund an area that loses money, where this is known in advance. For example urban utility users cross-subsidize rural utility users.

Diversification, on the other hand, is the situation described above where, in advance, it is not known whether any given project will succeed - only that it will succeed with some probability. By diversifying across projects the variance is reduced while the average payout is maintained.

Whilst superficially similar, the two situations are in fact fundamentally different which explains the divergent effects of increasing payouts in the two cases:

1. Increasing payouts in case of cross-subsidy:

Suppose initially a successful project makes £X and that this is needed in order to fund some other (implicitly loss-making) project (for whatever reason). Now suppose due to changes, for example a retrospective term extension, the project makes £X + £Y there is no reason at all to think that this extra £Y would be used to pay for more loss-making projects, instead it would just be put in the bank (or used to pay for profitable projects that would be funded anyway).

2. Increasing payouts in case of diversification:

Suppose average payout is £X initially but will be £X + £Y after the change (for example a prospective copyright term extension). This means that the firm may now take on riskier or more costly projects. (Now $p * (X + Y) \geq \text{cost}$ whereas before $p * X \geq \text{cost}$.)

Thus it is correct to say that money made on successful bands does not help unsuccessful bands since this would be cross-subsidy. However the prospect of making money on successful bands does result in investment in bands in general some of whom will lose money.

All this may seem academic but there is an important point. Retrospective term extensions increase income in the first manner, i.e. they increase the income of known successful projects. Thus they will have no effect at all on the funding of new artists - they just increase the profits of record companies or the income of a few lucky descendants of very successful artists.

Prospective term extensions are of the second kind and increase payout to individual projects in the future. Thus these can have a positive effect on funding. However since the extra revenues from term extensions are so distant their present value is very low (£1 in fifty years is worth less than 1p at a 10% discount rate). They are therefore not of much interest either to the labels or to individual artists.

Appendix 2. Open Rights Group's Submission to the APIG Public Inquiry into DRM.

Introduction

The Open Rights Group (ORG) is a member-supported organisation that seeks to publicise the concerns of UK technology users regarding public policy, with an emphasis on the effects of technological change (and the responses to it) on civil liberties.

The views here were collated and distilled from those contributed to our organisation via the net over the period of the consultation, together with contributions by our advisory board. We have included both these verbatim comments and some more detailed analysis of the issues of DRM as appendices to this document.

ORG does not seek to represent, nor are we funded, by any industry; our members are individuals who, while often characterised as consumers and customers in discussions of copyright, consider themselves as active participants in the society enabled by these new technologies.

Less than a decade ago, copyright law was a regulatory field that directly affected only a small group of professions. Now, with technologies like the internet and DRM, it is a part of lawmaking that intimately affects us all. We would be happy to put APIG in touch with our members, who we feel are currently underrepresented in the negotiations between rights holders and other industries that traditionally establish the balance represented in copyright law.

In the following document, italicised quotations are taken directly from comments from the public posted to our website which are reproduced verbatim in Appendix C. Numbered notes refer to Appendix B.

Executive Summary

1. DRM distorts traditional tradeoffs in copyright law by providing a mechanism for rights holders to restrict the way in which works are used, over and above the limitations set down by copyright law.
2. New types of content sharing licenses are at risk if DRM becomes widespread as DRM systems may prevent the public from accessing materials released under these alternative licenses.
3. The law should require that all media producers deliver works in the clear, i.e. without any DRM, to copyright deposit libraries.
4. All DRM will eventually become outdated, thus locking away the DRMed media, and users should be allowed to circumvent any DRM when this occurs.
5. The law should provide an immediate right of action for any disabled people to circumvent DRM systems in the process of accessing the media for their own consumption.
6. Content already has legal protection. Legal penalties for DRM circumvention go beyond what is required for the enforcement of copyright and create many negative side-effects.
7. DRM systems can and do have serious negative effects on computer functionality.
8. The UK Parliament should lead the way in developing a balanced global agenda on intellectual property issues.

Does DRM distort traditional tradeoffs in copyright law?

"Copyright law is a law like any other, and guilt is traditionally decided by human judges and jurors with the aid of opposing lawyers who are also (mostly) human beings. DRM puts the programmer in the role of police, prosecutor, judge and jury."

Copyright law seeks to carefully balance monopoly rights for creators and publishers with the public

interest in free expression, education, criticism and new forms of creativity.

Given that the monopoly holder can unilaterally set the terms of a digital rights management system's "contract", the change in the balance of copyright created by DRM is all in the direction of the copyright holder, who obtains new powers and benefits, while the user of the copyrighted material enjoys nothing but reductions in their freedoms.

Additionally, DRM is incapable of distinguishing between lawful re-use and unlawful re-use, because doing so requires that DRM understand the intention of the user – to be able to tell fair use from misuse. Such subtlety is beyond the rigid strictures of DRM.

Finally, it is notable that no current DRM system voluntarily seeks to restrict itself by enforcing only those rights granted to the rights holder under existing copyright law. For instance, the proposed CPCM standard for digital TV (DVB) allows the terms of protection to be extended to 200 years [1]. Other user rights, such as the doctrine of exhaustion [2] are likewise vulnerable.

Do new types of content sharing licenses (such as Creative Commons or Copyleft) need legislative change to be effective?

Pervasive digital rights systems can have a negative effect on rights holders who do not use or are unconnected to those exploiting these systems, including those who wish to encourage open and free distribution by releasing their works under alternative licenses such as Creative Commons or Copyleft.

For instance, if hardware-based DRM, such as Trusted Computing (See Appendix A) is in use and supported in law, powerful rights holders may end up with complete control of what consumers can and cannot see, regardless of whether the content in question belongs to those rights holders or not. This is because their content will only be usable if software the rights holder approves of is running, which may, in turn, lead to a situation where a typical user is only running software that is controlled by those rights holders. This software can then choose what can and cannot be viewed by the user. In effect, powerful rights holders may become censors for the general public. Of course, consumers could elect to not run the software dictated by these rights holders, but then they will be prevented from enjoying much of the commonly available content [3].

One legislative solution to this would be to make the use of circumvention tools legal when they are applied either in the course of a lawful use or to enable lawful uses.

One special case of this exclusion involves legislated DRM standards which demand that receiving devices are unalterable by end-users. This excludes the use of open source software in these systems, because such code is, by its very nature, always alterable by its users.

How should copyright deposit libraries deal with DRM issues?

"Unless someone outside the publisher has a non-DRM'd copy of the content, it is difficult to see how the eventual end of the copyright term will be enforced. Suppose, when "About A Boy" should enter the public domain, there are no non-DRM'd editions available?"

The law should require that media producers deliver works in the clear to copyright deposit libraries. Any lesser measure exposes the library to the risk that works will become unreadable when the hardware and software used to implement the DRM becomes obsolete [4]. The outcome would be that the DRMed material simply disappears.

With this provision, copyright deposit libraries can play a renewed role in a world that contains not just

use-restricted material, but copyrighted content encoded in other forms of proprietary and non-interoperable formats. By requiring that works be deposited in open, unencumbered formats, copyright libraries can serve as digital repositories for works that are in the public domain, where the public and entrepreneurs can source canonical editions and distribute and build upon them. New industries and businesses which exploit the rich resources of the public domain - a UK business releasing CDs of public domain music, or pre-loading UK MP3 players, say - can retrieve the source files from the deposit library, turning the public investment in archiving into an engine for economic growth.

How should consumers be protected when DRM systems are discontinued?

"Future historians will curse us if we allow the deployment of systems that will forever lock them out of records or cultural artifacts. DRM systems risk this."

All DRM will eventually become outdated and, because it is inevitably designed to resist access to its protected content, will effectively become unusable - unless there is some way to copy the material to newer systems. Again, there is a need to remove any legal obstructions to the production and dissemination of circumvention tools which allow access to lawfully acquired DRM-locked materials under these circumstances.

To what extent should DRM systems be forced to make exceptions for the partially sighted and people with other disabilities?

Blind people and others with sensory disabilities often have the statutory right to convert media to assistive formats, but if DRM is in place they are prevented from doing so.

In the UK, the Visually Impaired Persons Act 2002 allows for the transformation of media into the appropriate assistive formats. Beneficiaries of copyright exemptions should not, as current law dictates, have to appeal to the Secretary of State in the hope that he will order right holders to allow at some future point the exercise of those exceptions. They should have an immediate right of action against those who have released restrictive works.

Sensorily disabled people are often the unintended beneficiary of works that have had their DRM removed by file-sharers; for example ebook sharers who digitise texts not yet available to the public and "fansubbers" who add closed captions to imported DVDs. These materials are often the subject of legal countermeasures and thus these creative and assistive acts are done in defiance of anti-circumvention laws, because, for example, it is impossible to add captions to a movie without extracting the movie from its protective DRM wrapper.

WIPO's Standing Committee on Copyright and Related Rights met in November and recognised the seriousness of the problem for users with disabilities [5].

The UK could lead the way in this by setting a gold standard: both in providing for practical exception processes for those with disabilities, and by carving out more flexible transformative rights for the creative enhancement of existing works.

What legal protections should DRM systems have from those

who wish to circumvent them?

"The content already has legal protection against misuse. DRM is practical protection. If people want to practically circumvent DRM, and then use the content in legal ways, that should remain legal. For me, this is the heart of the issue, and the most important single point with regard to DRM."

Legal penalties against circumvention of DRM have so many negative side-effects that we believe it should be strictly limited to support the enforcement of copyright:

- Circumvention should be permitted if it is to enable a lawful use of the DRMed material.
- Circumvention tools should be legal if they enable a lawful use of the DRMed material.
- Circumvention should be permitted for academic or research purposes. Without this legal circumvention is unlikely to occur in practice, no matter how desirable.
- Circumvention should be lawful to gain access to lawfully acquired works where the DRM has failed or become obsolete, or where an online validation server is unreachable or has disappeared due to bankruptcy, etc.

This incentivises DRM makers to more closely model user rights in copyright.

The current system is attractive to rights holders, because it allows them to confiscate users' traditional rights and sell them back under false pretences, for example, as a licence. It does not reflect the current set of rights enshrined in any copyright law. Instead it allows rights holders to arbitrarily restrict the use of DRMed works as if the rights holders were de facto lawmakers.

Can DRM systems have unintended consequences on computer functionality?

DRM systems can have, and indeed they have had, unintended consequences for users. The most recent example, covered in more detail in the Appendix, was Sony BMG's DRM software which was installed from a music CD on users' computers without their permission, made those computers vulnerable to attack by viruses, and when removed caused serious malfunction.

In attempting to enforce use-restriction on their customers, Sony BMG ended up fulfilling all the effective (and, in some US states, legal) definitions of "spyware", unwanted software that invades user's privacy, and interferes with the operation of their machine. [[6]]

An affirmative statement that the Computer Misuse Act applies to this form of DRM would be a useful deterrent to such abuse.

What is the role of the UK Parliament in influencing the global agenda for this type of technical issue?

The UK occupies a pivotal global role in the development of policy for this, and other intellectual property issues. A key player in organisations which set global policies, such as WIPO and the EU, Britain also is in a unique position to act as a moderating influence on the United States, which is often the strongest advocate in these arenas for radical change in international copyright norms.

As Bernt Hugenholtz, chairman of the European Commission's Legal Advisory Board Intellectual Property Taskforce, has commented [7]: "The intense pressure from the copyright industries and, particularly, from the United States (where the main right holders of the world reside) ... has not allowed the Member States and their parliaments, or even the European Parliament, to adequately reflect upon the many questions put before them."

With British citizens' control over their own property and rights in the balance, we hope that our representatives in Parliament will ensure that the public interest is also spoken for at these negotiations, by overseeing and more closely defining our own global agenda.

Appendix A - Notes on Digital Rights Management

1 What is DRM?

Digital Rights Management (DRM) systems are use-restriction technologies, protected by anti-circumvention provisions under the EU CD and the 1996 WIPO Copyright Treaty (WCT). DRM software seeks to control how owners of lawfully acquired works use those works. It also seeks to control who may make players and interoperable technologies for use in connection with those works.

Both of these objectives harm the public interest, are technically infeasible, and upset the balance of interests between creators and the wider public which copyright law ought to reflect.

1.1 Controlling uses

Controlling the use of a work after it has been lawfully acquired presents an insurmountable technological challenge. Typically, DRM seeks to exert control by limiting activities such as printing, copying or redistribution.

Consider legitimate computer security, which concerns itself with preventing third parties – the attacker – from reading, interfering with or stopping the transmission of information between trusted parties. When Alice sends Bob a message, she uses security to prevent Carol from reading it, changing it, or faking it.

DRM, however, treats the intended recipient of works as the attacker – when you buy a DVD, the attacker that the DVD's DRM tries to control is you, the DVD's owner.

But DRM can never provide full control because its effectiveness is compromised at a fundamental level. DVD players, for example, must be able to unscramble the movie on the DVD, otherwise you would not be able to play it. So in order to prevent copying, your own DVD player has to conspire to keep you from saving the movie after it has been unscrambled.

Practically speaking, this is impossible. It is a tenet of computer security that an attacker with unlimited time and physical access to a sensitive computer can always get it to yield its secrets. It only takes a single skilled attacker to remove the DRM and make the unscrambled work available on the Internet for that DRM to be permanently broken. Subsequent attackers only need sufficient skill to locate the unscrambled copy on a P2P network, not the skill to crack the DRM.

See Professor Ed Felten's "CD Copy Protection: The Road to Spyware" <http://www.freedom-tinker.com/?p=93>

1.2 Preventing interoperable technologies

1.2.1 Legal Protection

Copyright law preserves competition by allowing for the reverse-engineering of file-formats and programs for the purpose of producing new, interoperable software. It is pro-competitive to have tools from multiple vendors available for any given file format – for example, to have multiple Web browsers, or to have programs such as Apple's TextEdit and the OpenOffice.org suite which can read Microsoft Word files.

However, in the case of DRM, anti-circumvention laws prevent the production of players compatible with DRM file formats. For example, the mPlayer media player can read and play back Microsoft's WMV videos, allowing consumers who invest in WMV files the choice of an alternative and more capable player. However, mPlayer circumvents the DRM in WMV, and is therefore of dubious legality, and cannot be readily obtained and used by British firms seeking to incorporate it into their commercial offerings.

Legally protected DRM creates a new class of proprietary file-formats which cannot be lawfully reverse-engineered. This limits competition and reduces choice for the consumer, resulting in 'lock-in' – once consumers start gathering media in a given file format, they find themselves unable to switch to another format without having to repurchase the media they already own.

1.2.2 Technical Protection

As mentioned above, DRM players must unscramble protected content in order to make it useful to the user. Because this unscrambled form can then be intercepted by the user and used to create a copy of the content, one approach to DRM is to introduce technical protection against this interception. A standard PC is currently unable to do this: in practice, it is not possible to control what is done with the data once it has been unscrambled.

Thus the computing industry is exploring the possibility of creating computer systems where the DRM is built into hardware, and the protected media can only be accessed when approved software is running. This allows the content owner to prevent interception of scrambled content by refusing to unscramble it if the computer is running any software that the content owner doesn't approve of. (In practice, this means that unscrambling will occur only if all the software running on the computer is approved by the content owner).

This is the aim of technologies such as those being developed by the Trusted Computing Group (<https://www.trustedcomputinggroup.org/home>) and Microsoft's Next -Generation Secure Computing Base (<http://www.microsoft.com/resources/ngscb/default.mspx>) .

Trusted Computing (TC) and similar systems do not prevent the eventual unlocking and releasing of content into circulation (attackers still have unlimited time and access to the TC system). They do, however, significantly increase the ability of rights holders and other remote groups to control the use of consumer computing hardware, and deny interoperability.

- Ben Laurie, for ORG