

SLS Society of Legal Scholars  
Strathclyde Conference 2005  
Subject Section: Intellectual Property Group B  
Session 4 Friday 9 September 11.15-12.45 A

Abbe E. L. Brown (AHRC Research Centre for Studies in Intellectual Property and Technology Law, University of Edinburgh)<sup>1</sup>

## IP, regulation and the enabling state<sup>2</sup>

### Introduction

In one corner there are those who see intellectual property (“IP”) as the basic foundation of innovation: who consider that without it, there would be no encouragement to innovate, and no incentive to invest in innovation.<sup>3</sup> In the other corner are those opposed to IP, who see it as unduly hindering the innovative process; dominating and homogenizing industries; directing efforts towards the fashionable and the profitable; and allowing information and developments, which should be available for all, to be harboured by a small number of IP owners.<sup>4</sup>

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<sup>1</sup> PhD Student and Research Associate. Solicitor admitted to practise in Scotland, England and Wales and Victoria, Australia. Modern Law Review Scholar 2003-4 and holder of Award from Clark Foundation for Legal Education 2005, which are both acknowledged with thanks. I am also grateful for the comments of IP, litigation and regulatory and public lawyers of Messrs Shepherd + Wedderburn from a presentation in January 2005, and for discussions with Graeme Colquhoun

<sup>2</sup> *Working discussion draft*. All comments welcome [a.e.l.brown@sms.ed.ac.uk](mailto:a.e.l.brown@sms.ed.ac.uk).

<sup>3</sup> See eg Sherwood, R.M. (1990) “*Intellectual Property and Economic Development*” Westview Special Studies in Science, Technology, and Public Policy, Westview Press Inc, Colorado, USA and Oxford, UK (“Sherwood”).

<sup>4</sup> For a review of some concerns see Report of the Commission on Intellectual Property Rights “*Integrating Intellectual Property Rights and Development Policy*” September 2002 <http://www.iprcommission.org> (“CIPR”); see also concerns set out in the Access to Knowledge draft Treaty <http://www.cptech.org/a2k/consolidatedtext-may9.pdf> (last accessed 5 September 2005); Butler, D. “Drive for patent-free innovation gathers pace” July 2003 <http://www.scidev.net/News/index.cfm?fuseaction=readNews&itemid=903&language=1> (last accessed 5 September 2005); and Lanjouw, J.O. “Drug Patents: Taking the Poorest Out of the Fight” December 2003, available at <http://are.berkeley.edu/lanjouw/milken.pdf> (last accessed 5 September 2005).

From those in the middle, there is some recognition that IP can be seen as reducing competition, to the detriment of the consumer and wider market development;<sup>5</sup> and also as producing negative, if not wholly objectionable, social and moral consequences - for example in respect of access to medicines, information and education.<sup>6</sup>

Competition law and human rights law,<sup>7</sup> together with the limits and exceptions contained within IP law,<sup>8</sup> have been prayed in aid to address, or mitigate, the problems and concerns considered. Ongoing research is considering the extent to which these avenues, particularly when combined, could be used as a restraining influence on IP, producing a more acceptable balance of interests.<sup>9</sup> Emphasis is being placed on the telecommunications sector, as a microcosm of the relevant issues: the potential for patents and copyright to restrict access to infrastructure and software, which could prevent establishment of vital communication links relevant to health and education;<sup>10</sup> the potential for patent and copyright to restrict opportunities for less fundamental

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<sup>5</sup> See eg *RTE and ITP v EC Commission* [1995] FSR 530 (“*Magill*”); *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG* [2004] 4 C.M.L.R. 28 (“*IMS Health*”).

<sup>6</sup> Eg Resolution of United Nations High Commissioner for Human Rights “Intellectual Property and Human Rights” “Sub-Commission on Human Rights resolution 2001/21” available at [http://www.unhcr.ch/Huridocda/Huridoca.nsf/\(Symbol\)/E.CN.4.SUB.2.RES.2001.21.En?Opendocument](http://www.unhcr.ch/Huridocda/Huridoca.nsf/(Symbol)/E.CN.4.SUB.2.RES.2001.21.En?Opendocument) (last accessed 5 September 2005) and see generally Medecins Sans Frontiers Campaign for Access to Essential Medicines” see <http://accessmed-msf.org/> (last accessed 5 September 2005)

<sup>7</sup> Examples are the Doha and Cancun declarations (“Declaration on the TRIPS agreement and Public Health” DOHA WTO MINISTERIAL 2001: TRIPS. Adopted on 14 November 2001. WT/MIN(01)/DEC/2 20 November 2001 and “Implementation of paragraph 6 of the Doha Declaration on the TRIPS agreement and public health” Decision of the General Council on 30 August 2003, [http://www.wto.org/english/tratop\\_e/trips\\_e/implem\\_para6\\_e.htm](http://www.wto.org/english/tratop_e/trips_e/implem_para6_e.htm)), supporting and facilitating use of compulsory licensing and parallel importing in respect of access to medicines, and rights to life and health; reliance on the human rights to freedom of expression and information when challenging possible impact of copyright and trade mark, both in publishing (eg in the English *Ashdown v Telegraph Group Ltd* case [2002] R.P.C. 5 (“*Ashdown*”)) and critical comment (eg in the South African Constitutional Court decision in *Laugh it Off v South African Breweries* <http://www.constitutionalcourt.org.za/site/laughitoff.html> (last accessed 2 August 2005)); and the application of the abuse of a dominant position doctrine when challenging copyright in the commercial information sectors (in the European Commission decision in *Microsoft* [2004] 5. C.M.L.R. 21 (“*Microsoft*”) and the European Court of Justice decision in *IMS Health*).

<sup>8</sup> See, in this regard, suggestions regarding seizing the opportunities which do exist within the strictures of TRIPS in Maskus, K.E. (2000) “*Intellectual Property Rights in the Global Economy*” Institute for International Economics, Washington D.C., USA (“Maskus”), 171 et seq; and CIPR 163

<sup>9</sup> See “Intellectual Property, Competition and Human Rights” project of the AHRC Research Centre for Studies in Intellectual Property and Technology Law at the University of Edinburgh <http://www.law.ed.ac.uk/ahrb/research/view.asp?ref=3>

<sup>10</sup> See eg requests by African midwives for mobile phones – see *Africanwoman Scotland G-8* edition <http://www.africanwoman.net/news.php?IssueID=33>; and the “Information Village Research Project” of the MS Swaminathan Research Foundation [http://www.mssrf.org/special\\_programmes/ivrp/ivrpmmain.htm](http://www.mssrf.org/special_programmes/ivrp/ivrpmmain.htm) (last accessed 5 September 2005).

communication, such as expression and information, by limiting access to, and the use which may be made of, online material;<sup>11</sup> and the potential for patent and copyright to prevent the emergence of small local telecommunications service providers.<sup>12</sup> Further, the complexity of national, regional and international telecommunications regulation,<sup>13</sup> and initiatives such as the World Summit on the Information Society,<sup>14</sup> are a reminder that these questions do not, in fact, solely involve IP and related legal fields, but are part of a bigger picture.

But is there an alternative – if the goal is to encourage and ensure broad based innovation in key areas, without undesirable side effects, could or should this be brought about by public regulation, in combination with existing industry and competition regulation, rather than private rights?<sup>15</sup> Is there a role for a UK national Innovation Regulator?

This paper will conduct an exploratory overview of the broad range of issues raised by this question, considering whether, and how, such a regulatory regime could be introduced; the practical and theoretical problems which may arise; what steps are already being taken; what, if anything, may be achieved; and the extent to which lessons could be learnt for a new approach to IP. It concludes that not only is it unlikely that such a regime would or could be introduced, but that little may be gained. However, the

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<sup>11</sup> Eg copyright infringement actions against downloaders; and demanding high fees for use or reproduction of hardware and software the subject of IP

<sup>12</sup> Again, by demanding high fees for licensing IP protected hardware and software without which, (possibly due to standardisation considered below), a potential competitor would either be unable to operate in the market at all, or would not appeal to consumers.

<sup>13</sup> UK Communications Act 2003; Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services; Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services; Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities; and Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services. See also, at international level, the activities of the UN International Telecommunications Union (<http://www.itu.int/home/index.html>); and the option (unlike the case with TRIPS) for WTO members to accede to telecommunications commitments - see GATS Annex on Telecommunications [http://www.wto.org/english/tratop\\_e/serv\\_e/12-tel\\_e.htm](http://www.wto.org/english/tratop_e/serv_e/12-tel_e.htm) and Fourth Protocol to GATS [http://www.wto.org/english/tratop\\_e/serv\\_e/4prote\\_e.htm](http://www.wto.org/english/tratop_e/serv_e/4prote_e.htm)

<sup>14</sup> See <http://www.itu.int/wsis/> - Declaration of Principles and Plan of Action from 2003, with PrepCom 3 taking place 19-20 September 2005, prior to Tunis Meeting November 2005

<sup>15</sup> An approach touched on in passing, but not explored in detail, in Drahos, P. (1996) “A Philosophy of Intellectual Property” Dartmouth, Aldershot, UK and Vermont, USA, 122

analysis is a reminder of the wider landscape in which IP is situated, and of the other fields and arguments which should be considered when assessing, challenging and defending IP.

## A (new) role for regulation?

### *A place for everything...*

If the market, operated by private power fuelled by IP, can fail to deliver in key areas, such as identified in telecommunications, could the state do better? Although there is at present significant public funding of research and development in many fields, and, indeed, the UK Department of State and Industry states its goals to include “promot[ion] of innovation”<sup>16</sup> this is around the edges of, or in addition to, the work of the private sector. Private/public collaborations,<sup>17</sup> and government initiatives,<sup>18</sup> are all working with, around and towards IP rights and commercial interests.<sup>19</sup>

Supplanting the private with the state in this regard seems contradictory to the accepted wisdom of free competition and free trade (to which, at present, IP is of course the main

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<sup>16</sup> See <http://www.dti.gov.uk/> under “For Business” Section; the research and development section of the website opened 2005 <http://www.innovation.gov.uk/randd/>; and the Speech of Lord Sainsbury at TechnologyWorld05

<<http://www.dti.gov.uk/ministers/speeches/sainsbury170505.html>>. Last accessed 30 August 2005.

<sup>17</sup> Eg, see Malaria Vaccine Initiative (<http://www.malariavaccine.org/> - last accessed 5 September 2005)) cf 2004 OECD report in respect of the Netherlands, “Public-Private Partnerships for Research and Innovation: An Evaluation of the Dutch experience”. Available at <http://www.oecd.org/dataoecd/49/18/25717044.pdf> (last accessed 5 September 2005). Note also literature review by, and comments of, Susan Sell in respect of such initiatives and the opportunities for corporate control at Sell, S.K. “The Quest for Global Governance in Intellectual Property and Public Health: Structural, Discursive and Institutional Dimensions” Prepared for International Studies Association Conference, Canada, 2004. Available at <<http://media-cyber.law.harvard.edu/blogs/gems/politicshiv/sell.pdf>> (last accessed 29 August 2005) (“Sell 1”), 7 .

<sup>18</sup> See “The UK Government Response to the Report of the Commission on Intellectual Property Rights” p.60. Available at [http://www.iprcommission.org/papers/pdfs/govt\\_response/govt\\_response.pdf](http://www.iprcommission.org/papers/pdfs/govt_response/govt_response.pdf) (last accessed 5 September 2005) (“UK Response”)

<sup>19</sup> See also eg Creative Industries IP Forum, which proceeds from the basis that IP is at the heart of creativity and as such should be protected - <[http://www.culture.gov.uk/creative\\_industries/ip\\_forum.htm](http://www.culture.gov.uk/creative_industries/ip_forum.htm)> (last accessed 31 August 2005).

international exception).<sup>20</sup> In any event, however, competition and trade have never been entirely free of regulation. Some early patents were introduced to enable the monopoly of craft guilds to be overcome, and institutions such as the Corn Laws, the East India Company, tariffs and the restrictions of the Gold Standard have always meant a less than level playing field – with attempts to move away from them often having extreme international consequences.<sup>21</sup>

More recently, the UK privatisation of utilities, including railways and of course telecommunications, heralded not the end of public control but the introduction of complex schemes of regulation to ensure that these key public services, while now at least partly privately owned, were not wholly abandoned to the vagaries of the market. This regulation has included price regulation, service targets, control of access to the network, and universal service obligations (basic levels of service which must be provided.)

### ***.....and everything in its place?***

Accepting the place of regulation in a market economy, could this be the proper means of delivering effective and balanced innovation? Could a framework be developed of direction and funding, to create an innovative environment, with research and output targeted at appropriate market sectors and knowledge areas, and relevant safety nets (such as in health, educational resources and delivery, and telecommunications.) Can “innovation” be treated, from a regulatory perspective, like “health”, “education” or even “transport”?

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<sup>20</sup> See eg Sell, S.K. (2003) *Private Power, Public Law. The Globalization of Intellectual Property Rights* Cambridge University Press, Cambridge, UK (“Sell”), 15; Maskus, K.E. and Reichman, J.H. “The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods” *JIEL* 7(2) June 2004 279, (“Maskus/Reichman”) 282/3. See also Braithwaite, J. and Drahos, P. (2000) *Global Business Regulation* Cambridge University Press, Cambridge, UK (“Braithwaite/Drahos”), noting, at 221, Picciotto, that TRIPS is unique in the international context in imposing positive regulatory standards

<sup>21</sup> Including war...See Polanyi, K. (1957) *The Great Transformation. The political and economic origins of our time.* Beacon Press, USA, 127, 193, 140, 148, 150, 185, 201, 228-231; and Sell, 18.

Several basic questions are raised by this: firstly, at a political and philosophical level, would this still be unattractive and unjustifiable state intervention in what should be private activity? Secondly, how, at a theoretical level, could this regulation be put in place? Thirdly, how, at a practical level, could a system and its leaders have the necessary sector expertise and knowledge? Finally, even if all these questions could be addressed, would the result offer the flexibility and opportunity for all types of innovation, including radical and disruptive innovation, to occur?<sup>22</sup>

### ***Should it be done?***

The first question, at least in the present UK environment, need not prove problematic. Despite the end of the Nanny state and the growth of personal and corporate responsibility, there is growing support in centre left political theory for the state to play an involved “ensuring”, as opposed to the less active “enabling”, role. “Ensuring” this would entail creating a framework for the private sector to move forward, with the state providing a basic safety net, intervening in the market when necessary.<sup>23</sup> A regulatory authority and framework for encouragement of innovation, with a universal service obligation, would be consistent with this approach.

### ***An Innovation Regulator***

#### **Possible approaches**

##### **Form and theory**

A more challenging question is “how”? Regulatory theory and practice teaches a number of different approaches:<sup>24</sup> legislation or regulator’s guidelines, independent of or part of

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<sup>22</sup> Leaving aside, for present purposes, the eternal question of what it is which actually makes different people want to create and innovate, and the extent to which it can indeed be regulated or controlled. For one perspective see Kapranos, A “A Gig with a Difference” <http://www.law.ed.ac.uk/ahrb/script-ed/issue2/transcript.asp>.

<sup>23</sup> See Giddens, A. “Neoprogressivism. A New Agenda for Social Democracy” in Giddens, A. (ed) (2003) *The Progressive Manifesto. New Ideas for the Centre-Left* Policy Network. Polity Press, Cambridge, UK (“Giddens”), 3, 6/7, 9, 13; and also Schuppert, F. “The Ensuring State” in Giddens, 57, 62, 64, 70.

<sup>24</sup> For a useful introduction to the field of regulation, see Baldwin, R. and Cave, M. (1999) *Understanding Regulation. Theory, Strategy and Practice* Oxford University Press, Oxford, UK

government, compulsory and voluntary codes and standards, guidelines with targets, or informal intervention – a combination of the collaborative and coercive, with the outcome often dependent on environment and audience.<sup>25</sup> Recent research suggests that while there may be some place for coercive (even violent) control and dialogue, more productive is likely to be some form of web, building on broad interaction and negotiation between a variety of relevant parties. Here, this could be corporations, innovators, creators, users, professionals and NGOs – not merely government and IP owners.<sup>26</sup>

The appropriate model varies, however, between function, industry sector, country and culture: there is no one solution and there is frequently a complex interaction.<sup>27</sup> The differences in approach in regulation of railways in the UK and Germany,<sup>28</sup> as well as more general lack of consensus as to how to regulate “knowledge goods”,<sup>29</sup> are testament to this. In the light of this, it is perhaps revealing that the present overall regulatory focus of the UK is on practical substance: ensuring that regulation does not impose an undue burden on business, and is proportionate, accessible, consistent, transparent and targeted,<sup>30</sup> rather than addressing specific questions of form.

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<sup>25</sup> See eg Braithwaite/ Drahos 332, 338, 566, 527 (particularly regarding telecommunications at an international level) and Maskus/Reichman 307-8

<sup>26</sup> For detailed analysis see Braithwaite/ Drahos, and Sell 1. Note the consideration by Braithwaite/Drahos at 607 of the work of Habermas, regarding the potential role of the citizen in restricting the state – and that while this might be an overly utopian approach, this could also form part of the total system of checks and balances. This is also consistent with Habermas’ theory of reflexivity, and of the role of the recipient of law in conferring its legitimacy. For an introductory overview see Deflem, M. (ed) (1996) “*Habermas, Modernity and Law*” SAGE Publications Ltd, London, UK

<sup>27</sup> See eg Taylor, M.R., Rubin, E.S. and Hounshell, D.A. “Regulation as the Mother of Innovation: The Case of SO<sub>2</sub> Control” *Law & Policy* Vol. 27 No. 2 April 2005, 348, 349/50, 353/6, 370.

<sup>28</sup> Lodge, M. “Competition, Innovation and Regulation. The Regulatory State and Policy Failure: Regulatory Regimes in Britain and Germany” Paper for the 51<sup>st</sup> Political Studies Association Conference April 2001, Manchester, UK. Available at <http://www.psa.ac.uk/cps/2001/Lodge%20Martin.pdf> (last accessed 29 August 2005)

<sup>29</sup> See consideration in Maskus/ Reichman 293

<sup>30</sup> See The 2005 UK Innovation Report

<http://www.innovation.gov.uk/innovationreport/index.asp?lv11=5&lv12=0&lv13=0&lv14=0> (last accessed 31 August 2005) (“Innovation Report”). Note also proposed establishment of Better Regulation Commission from 1 January 2006 (replacing the Better Regulation Taskforce) with a focus also on influencing EU regulation. See <http://www.brtf.gov.uk> (last accessed 31 August 2005)

## Useful models

Two relevant regulators for present consideration are the UK Ofcom,<sup>31</sup> responsible for telecommunications, broadcasting and radio, and the UK Health and Safety Executive (“HSE”).<sup>32</sup>

Ofcom deals with a complex, fast moving innovative industry, which is also highly regulated at regional and international level.<sup>33</sup> It imposes price controls; additional restrictions on operators which have, often because of historical reasons, significant market power; regulates infrastructure to which, if there is to be more than one operator in the industry, access must be provided; and is concerned with key questions of vertical integration and horizontal activity.<sup>34</sup>

In addition, because access to basic telecommunications is considered essential for all to live their lives, Ofcom administers a universal service obligation. This requires certain basic levels of affordable access to be provided, irrespective of the apparent commercial sense of this, subject to some form of payment being made to the provider. The present system, particularly regarding means of recovery of cost, and whether the obligation should also cover mobile and broadband telecommunications, is under review.<sup>35</sup>

These essential features of Ofcom are very similar to all forms of industry and utility regulators, although different forms of achieving the goals may be chosen. The goal is to prepare, and nurture, the industry and the services it provides, such that it is ultimately

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<sup>31</sup> See <http://www.ofcom.org.uk> (last accessed 1 September 2005)

<sup>32</sup> See <http://www.hse.gov.uk> (last accessed 1 September 2005)

<sup>33</sup> See above, footnote 13.

<sup>34</sup> For introductions to this fast moving field see Walden, I. and Angel, J. (eds) (2001) “*Telecommunications Law*” Blackstone Press, London, UK (“Walden”) and Wilsdon, J. and Stedman Jones, D. (2002) “*The politics of bandwidth. Network innovation and regulation in broadband Britain*” Demos, London, UK (“Wilsdon/Stedman Jones”) [Note that these predate the most recent UK and EU legislation]. See regular updates [www.ofcom.org.uk/telecoms/](http://www.ofcom.org.uk/telecoms/) (last accessed 31 August 2005), including the Ofcom Strategic Review of Telecommunications June 2005 update [http://www.ofcom.org.uk/static/telecoms\\_review/june05.htm](http://www.ofcom.org.uk/static/telecoms_review/june05.htm) (last accessed 31 August 2005)

<sup>35</sup> See <http://www.ofcom.org.uk/consult/condocs/uso/statement/#content> - consultation period ends 28 September 2005 (last accessed 31 August 2005)

able to be left to the market (subject only to control by competition law when necessary).<sup>36</sup>

However, although Ofcom operates in fields which directly involve significant innovation, and which indirectly can provide the building blocks for wider innovation,<sup>37</sup> the responsibilities of Ofcom relate to its own industries. This would not be the case for an Innovation Regulator, which would focus on delivery of a broader good – innovation, across sectors. In this sense, the role of the Innovation Regulator would be more akin to that of the HSE.

The HSE (which is set up by and responsible to government, rather than constituted by statute), operates across industries and delivers a specific good – health and safety. It is “responsible for the regulation of almost all the risks to health and safety arising from work activity in Britain.”<sup>38</sup> The HSE has an extensive planning and strategic evaluation process, including targets and review processes, consultation, and evolution in line with society’s needs.<sup>39</sup>

### **The realities of innovation**

Practical options to encourage and facilitate innovation on an HSE model could be a combination of: forced sharing of infrastructure and resources (eg laboratory space and access to raw materials and data),<sup>40</sup> focussed research grants and tax benefits,<sup>41</sup> (important given the possible fall in private investment without IP rights)<sup>42</sup> research

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<sup>36</sup> See “Competition and the Future of the UK Telecoms – the Government Perspective” July 2005 Speech Mike O’Brien MP <http://www.dti.gov.uk/ministers/speeches/obrien260105.html> (last accessed 30 August 2005)

<sup>37</sup> See eg Wilsdon/Stedman Jones, London, UK, 38/9

<sup>38</sup> See HSE website <http://www.hse.gov.uk/aboutus/index.htm> (last accessed 31 August 2005)

<sup>39</sup> See <http://www.hse.gov.uk/aboutus/plans/index.htm> (last accessed 31 August 2005)

<sup>40</sup> Using analysis similar to that already seen in the IP and competition law cases considered above – see footnote 5.

<sup>41</sup> Cf July 2005 UK consultation paper in this regard “Supporting Growth in Innovation” <[http://213.219.8.102/pdfs/dti/innovation/rd\\_taxcredit.pdf](http://213.219.8.102/pdfs/dti/innovation/rd_taxcredit.pdf)> (last accessed 30 August 2005), also providing details of the present tax credit system and of Vaccine Research Relief. See also CPtech proposed Medical R&D Treaty: <http://www.cptech.org/workingdrafts/rndtreaty4.pdf> (last accessed 7 September 2005).

<sup>42</sup> Exploration of this important area is outside the scope of this paper.

programmes planned on the basis of wide and thorough soundings,<sup>43</sup> publication and dissemination programmes,<sup>44</sup> and performance targets.<sup>45</sup> The examples cited show that these exist to some extent at present: but these initiatives are either specifically in combination with IP, or designed apparently without reference to IP and its objectives and values.<sup>46</sup>

The most creative aspect of the proposal would be a universal innovation obligation. Either through some form of compulsory pro bono system, or regular identification of specific projects which should be carried out,<sup>47</sup> all businesses of a particular size could be required to engage in or tender for an annual amount of research and development. Possible projects could be means of environmental control and improved collection of litter, or a cost effective means of all blood types and allergies being automatically recorded in a central database via mobile phones.

## Possible pitfalls

### Capture

If there are possibilities in terms of model, form and substance for the Innovation Regulator, a significant practical challenge would be how it could acquire the necessary

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<sup>43</sup> Possibly akin to the system of the Intermediate Technology Institutes recently established in Scotland - see <http://www.itscotland.com> (last accessed 31 August 2005), and the proposed research platforms from the strategic research agenda of the European Union Lisbon Agenda in Framework Programme 7, with proposals for a European Research Council. See further details at <http://www.cordis.lu/fp7> (last accessed 31 August 2005), in particular Proposal for Council Decision concerning research, technological development and demonstration activities April 2005

[ftp://ftp.cordis.lu/pub/documents\\_r5/natdir0000001/s\\_6797005\\_20050427\\_100958\\_2461en.pdf](ftp://ftp.cordis.lu/pub/documents_r5/natdir0000001/s_6797005_20050427_100958_2461en.pdf) (last accessed 31 August 2005). Although primarily focussed on encouragement, funding and planning of innovation in key sectors, this also makes clear the need to respond to industry and to work with the IP system (see 65). See also report on ongoing work in Joint Technology Initiatives, European Technology Platforms and the need to foster private/public R&D partnerships June 2005 [ftp://ftp.cordis.lu/pub/technology-platforms/docs/tp\\_report\\_council.pdf](ftp://ftp.cordis.lu/pub/technology-platforms/docs/tp_report_council.pdf) (last accessed 31 August 2005).

<sup>44</sup> Cf UK Science & Innovation Investment Framework 2004-2014 July 2004 [http://www.hm-treasury.gov.uk/media/33A/AB/spend04\\_sciencedoc\\_1\\_090704.pdf](http://www.hm-treasury.gov.uk/media/33A/AB/spend04_sciencedoc_1_090704.pdf) (last accessed 30 August 2005) (“Investment Framework”) – note focussed primarily on university dissemination and quality, amounts of investment and the need for relations with and responsiveness to business – see Box 1.1 overview

<sup>45</sup> Cf targets set out in Investment Framework, see paras 1.2 and 1.3

<sup>46</sup> For full analysis of the issues relating to IP, public funding, and science, see Waelde, C. and Mcginley, M. “Public Domain; Public Interest; Public Funding: focussing on the ‘three Ps’ in scientific research” <http://www.law.ed.ac.uk/ahrb/script-ed/vol2-1/3ps.asp>? (last accessed 1 September 2005).

<sup>47</sup> (possibly through a public competition, a process akin to the present Research Council grant application system, or the ITI process)

knowledge of innovation processes, and industry sectors, to competently carry out its duties. The Innovation Regulator would need to work closely with those involved in various forms of innovation, take regular soundings to plan the direction of research, and have staff with the necessary skills to operate in each industry sector – such staff likely having some background in industry.

This in turn, however, has the potential for the Innovation Regulator to be captured, innocently or deliberately, by particular industry members, the industry itself,<sup>48</sup> or, indeed, the government’s political agenda. The first two scenarios could result in research, funding, and tax advantages being allocated in a direction which, though justifiable, would favour the interests of industry (say treatment for mental health problems), rather than those arguably in more extreme, but less obvious or prevalent, need (say treatment for new strains of TB). The problems of the IP system, in terms of its linkage with corporate interests, would therefore be repeated – and exacerbated, because of the regulatory involvement. A political agenda could lead to controversial, but potentially valuable, research (such as in stem cells) not being pursued, without opportunity for public debate.

### **Controlling the uncontrollable**

Recognising the valid role of multiple actors and different approaches in regulatory theory, impacts upon arguments for central control of innovation and planning - and supports the need for flexibility and fluidity. More fundamentally, there is a strong argument that innovation, by its nature, comes in waves, and forms part of its organisational and institutional environment.<sup>49</sup> Thus, a system for encouraging innovation cannot simply be superimposed upon an industry (say telecommunications) and broader field (say, including NGOs arguing for broader access to information and communication tools) to which it is unsuited. Even choosing an approach for one industry

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<sup>48</sup> See consideration of this in Braithwaite/Drahos 482, 560 and 629 (and 204, in terms of TRIPS and 490 regarding ITU telecommunications standard setting).

<sup>49</sup> See Freeman, C. and Louca, F. (2002) “*As Time Goes By. From Industrial Revolutions to the Information Revolution*” Oxford University Press, Oxford, UK, 63, 148, 174/5, 178, 180, 200, 254, 278, 299-300, 321-327, 369

is problematic: in telecommunications, it has been argued that there should be active regulation to create a commons environment in respect of key resources<sup>50</sup> to facilitate innovation;<sup>51</sup> with the wholly contrary approach, that telecommunications should have been left entirely to the market, also receiving support.<sup>52</sup>

A further twist comes from innovation itself. Work is growing on the distinction between radical, or disruptive, innovation, and incremental, or sustaining, innovation. The latter builds on existing work (patents having been criticised as a stifling influence in this regard); as opposed to radical innovation, where one is exploring a new field, or adopting a new approach to an existing one.

Radical innovation is not necessarily more complex than incremental, indeed it has been argued that it is invariably more straightforward – but it requires an appropriate environment to enable and empower the innovators, and their managers and funders, to look outside their present tunnel of operation and perceptions of need.<sup>53</sup> The essence of radical innovation is that it is disruptive – it does not seem to be planned, does not directly build on what has been done before, and, indeed, may have highly destructive consequences for it.<sup>54</sup> If established managers struggle with engaging and dealing with this, it is highly unlikely that an emerging Innovation Regulator could create an appropriate framework to deal with this in a number of industries.

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<sup>50</sup> Such as local loop unbundling and vertical deintegration of incumbents

<sup>51</sup> See Wilsdon/Stedman Jones, 10, 20, 24

<sup>52</sup> See eg Crandell, R.W. “The Remedy for the “Bottleneck Monopoly” in Telecom: Isolate It, Share It, or Ignore It?” Winter, 2005 72 U. Chi. L. Rev. 3 re break up AT&T in US, and dealing with the local loop – in this regard cf Wilsdon/ Stedman Jones, 26-7

<sup>53</sup> An example of the difficulties which can arise in the telecommunications industry can be seen in “Is the Operator Arms Race Stifling Innovation in the Mobile Telecoms Sector”, commenting on CapGemini and INSEAD research, 2004, available at [http://www.us.capgemini.com/news/current\\_news.asp?ID=41](http://www.us.capgemini.com/news/current_news.asp?ID=41) (last accessed 5 September 2005).

<sup>54</sup> See Wilsdon/ Stedman Jones, 10, 17-9, 31-6, 40; Kay, J. “The Embedded Market” in Giddens, 43-4, 46-8, 50; and more generally Christiansen, C. M. (1997, 2000, 2003) “*The Innovator’s Dilemma. The Revolutionary Book that Will Change the Way You Do Business*” HarperBusiness Essentials, USA, which includes several case studies.

## **Overview**

On balance, therefore, there is an argument that innovation, particularly in less commercially exciting or attractive areas, would be better served by more supervisory control of the innovative process rather than simply leaving it to the market. Ex ante administration of innovation could mean that there is less clustering, and possibly duplication, of activity in profitable areas (such as diet drugs or the smallest mobile handset), or abandonment of less profitable and fashionable areas of work which may still be of immediate and long term benefit to society (such as carriages on public transport designated for wheelchairs and buggies, or developing wholly vandal proof public telephones).

Politically, there is an argument that this could be done. The challenge is more how to impose such a system on a relatively vibrant market economy and still hope to maintain the benefits of such an economy; and, more broadly, how to ensure that there is still scope for valuable, wholly unanticipated, and, perhaps, unattractive, innovation to take place. There is a need for a flexible means of encouragement and reward of innovation; and a means of addressing problems. Perhaps concerning for challengers of IP, the IP system, is, or could be, not dissimilar to this.

## **Back to IP?**

### ***IP's present place***

Regional and international IP treaty obligations will not be lightly cast aside, nor will the key role of IP in the UK's innovation strategy.<sup>55</sup> This does not prevent, however, exploration within and around IP.

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<sup>55</sup> The Innovation Report sets out three key target areas: better regulation (see above re proposed establishment of Commission), standardisation, and working with IP. In respect of IP it is clear that the emphasis is on raising awareness of IP among innovators, (consistent with, for example, the teaching of IP

Commentators have considered IP, and TRIPS in particular, as a form of regulatory regime and market control,<sup>56</sup> and indeed as a form of regulation of innovation.<sup>57</sup> The existing IP system in TRIPS and in national laws permits, and in most cases provides, some exceptions to the exclusive rights conferred by IP. These include compulsory licensing, parallel importing, fair dealing, private use and research exemptions, and the public interest.<sup>58</sup> These exceptions must be interpreted in the UK so far as possible to give effect to human rights;<sup>59</sup> in addition, as considered, the exercise of IP has been the subject of regular scrutiny by competition law and policy.<sup>60</sup> So at present, IP is a form of regulation of innovation; with some provisions for internal flexibility and exception; and subject to wider restriction by other legal doctrines in the courts, and by interventionist regulatory practice.

IP is also subject to competing and conflicting influences, similar to the regulatory web factors considered above. There are growing schemes of attack on the extreme

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in the Postgraduate Course at the Hunter Centre for Entrepreneurship at the University of Strathclyde, see <http://www.entrepreneur.strath.ac.uk/postgrad/> (last accessed 31 August 2005), and on facilitating civil and criminal IP enforcement, rather than considered any new approach to IP. See also introduction to UK Response.

<sup>56</sup> Sell, 29; and Maskus, above.

<sup>57</sup> See Anderman, S. D. (1998, 2000) “*EC Competition Law and Intellectual Property Rights. The Regulation of Innovation*” Oxford University Press, Oxford, UK.

This analysis of the interface between EC competition and IP, sub-titled “the regulation of innovation”, proceeds from the assumption that IP does encourage innovation, and that the impact of competition on IP therefore impacts directly on innovation (see 4,5, 249. While the latter part of the analysis is correct, the initial assumption is perhaps overly sweeping. Such an approach is not unusual, however, witness the detailed analysis of the extent to which IP protection was required and justifiable in the US in respect of unpatentable innovation: Lichtman, D.G. “The Economics of Innovation: Protecting Unpatentable Goods” February 1997 81 Minn. L. Rev. 693; and see generally Sherwood, referring at 196 to the “enabling infrastructure” of IP in bringing about innovation.

<sup>58</sup> See TRIPS articles 6,7, 8(1), 13, 30, 31; re UK legislation, see sections 29(1), 30 and 171(3) Copyright Designs and Patents Act 1988; sections 48, 60(5)(a) and (b) Patents Act 1977

<sup>59</sup> Section 3 Human Rights Act 1998 – see also *Ashdown* and *Levi v Tesco* [2003] R.P.C. 18. The potential role for human rights in interpretation of IP legislation is considered in “Human rights: in the real world” a paper submitted by the author to the Journal of Intellectual Property Law and Practice.

<sup>60</sup> Eg *Microsoft*, *IMS Health*, *Magill*. Note, however, the limits on this: the place of competition law, and any form of compulsory sharing of IP in the case of abuse of a dominant position, is in the EC subject to specific, if unclear, requirements. Note also the decision of the US Supreme Court in *Verizon v Trinko* 540 U.S. 682 (2004), concerning essential facilities arguments over terms of access to telecommunications facilities. It was held that there is no general duty of access in the US in terms of an alleged refusal to deal, particularly against the backdrop of complex regulation of telecommunications access

consequences of IP, and increasing restrictions, covert and overt, on the use which IP owners may choose to make of their IP. These include the backlash to TRIPS in fields which had hitherto viewed trade and IP as irrelevant, such as public health, information and education;<sup>61</sup> scrutiny of the relationship between IP and industry standards (both private, public and de facto);<sup>62</sup> and the evolving relationship between IP, corporate power and social responsibility.<sup>63</sup>

The combination of these factors suggests that, while there is still a strong industry fuelled IP lobby, and powerful IP owners, there is also a growing acceptance of, and resignation to, the fact that IP should be viewed as part of a wider system. IP owners cannot behave with impunity.

### ***Tilting: the balance or at windmills?***

Untangling or resituating this web, by introducing a national Innovation Regulator, is likely only to be counterproductive. As is seen with reaction to initiatives to alter or minimise the impact of IP, such in respect of access to medicines,<sup>64</sup> (and, looking back, the abolition of IP in Switzerland and the Netherlands in the 19<sup>th</sup> Century,)<sup>65</sup> perceived frontal attacks on IP will be resisted. More subtlety and engagement is advisable. This is

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<sup>61</sup> See Sell 1; and momentum leading to The Geneva Declaration on the Future of WIPO <http://www.cptech.org/ip/wipo/genevadeclaration.html> (last accessed 5 September 2005)

<sup>62</sup> See consideration of the need to manage, and where necessary curb, existing IP when setting private or public standards, as considered in Lemley, M.A. “Intellectual Property Rights and Standard-Setting Organizations” December, 2002 90 Calif. L. Rev. 1889; but note also Innovation Report re valuable role accorded to standards in the UK, and the intention to establish a National Standards Strategic Framework. Regarding IP in telecoms standards at international level, see documents and policies at <http://www.itu.int/ITU-T/ipr/index.html> (last accessed 6 September 2005).

<sup>63</sup> See eg Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights (available at <http://www1.umn.edu/humanrts/links/norms-Aug2003.html> (last accessed 5 September 2005)) and the health and pharmaceutical aspects of the Business Leaders Initiative on Human Rights (see [http://www.bitc.org.uk/news/news\\_directory/human\\_rights.html](http://www.bitc.org.uk/news/news_directory/human_rights.html) (last accessed 5 September 2005))

<sup>64</sup> See eg Sell 1, 8-11, 20-5 and <http://www.cptech.org/ip/health/c/brazil/> (last accessed 5 September 2005) regarding recently controversy as to whether it was appropriate for Brazil to invoke compulsory licensing given its economic situation

<sup>65</sup> See overview in Bainbridge, D.I. (1999) (4<sup>th</sup> edn) “*Intellectual Property*” Financial Times Pitman Publishing, London, UK, 323-5

particularly so if innovation is being viewed as akin to health and safety: there would be no prospect of the regulation fading into market competition; any system of innovation would need to be viewed as an established part of the landscape.

Advocating a continued role for IP, however, is not the same as supporting the status quo. Greater focus on IP from a regulatory perspective would further contribute to the existing web of challenge to IP. IP should (no longer?) be seen as a legitimate incumbent, to which only limited exception or restriction is permitted. The regulatory perspective further reveals IP’s proper role to be a tool, or a cog in the wheel; a limited exception to free competition and trade for specific reasons; likely the most effective means of achieving the goal of encouragement of innovation and necessary investment in it; but not inviolable.

Thus although regulatory discourse has little place in individual IP litigation cases when arguing as to the proper interpretation of legislation, or, indeed, immediate impact on actors in considering specific IP rights, it has a valuable role in developing debate, and public, political and corporate consciousness, as to IP’s proper place and implications. A subtle, but potentially significant, shift in balance.

## Conclusion

A national Innovation Regulator is unlikely to be effective, or to solve the problems raised by IP. Innovation should not be seen as a public good or utility which can be delivered in the same way as electricity or transport. A lighter, more creative, touch is required; and moving away from the present system of private rights would not provide this. Different regulatory tools such as codes of practice, for example for initiatives in mobile telecommunications, and funding and tax breaks for specific fields, should be adopted and used in tandem with IP; with IP, critically assessed,<sup>66</sup> being seen as one flexible part of the UK’s means of encouragement of innovation.

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<sup>66</sup> Unlike the present UK Government approach suggested in the Innovation Report

“IP, regulation and the enabling state”