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LEGISLATIVE REVIEW

REVIEW OF IPR ACT AND REGULATIONS: INTELLECTUAL PROPERTY RIGHTS FROM PUBLICLY FINANCED RESEARCH AND DEVELOPMENT ACT, ACT NO 51 OF 2008, REPUBLIC OF SOUTH AFRICA

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INTRODUCTION

South Africa's *Intellectual Property Rights from Publicly Financed Research and Development Act*, Act No 51 of 2008 (the IPR Act) was passed on 22 December 2008. The Act's main object is to 'make provision that intellectual property emanating from publicly financed research and development is identified, protected, utilised and commercialised for the benefit of the people of the Republic' (IPR Act, 2008: s. 2(1)). The Minister of Science and Technology published corresponding draft regulations (the IPR Regulations) for comment on 9 April 2009 (DST, 2009b).¹ To date, the legislation and its attendant draft regulations have been dogged by criticism from lawyers, academics and commentators, who have, inter alia, labelled the IPR Act 'unconstitutional' and 'unworkable' (Rens, 2009) and queried whether the IPR Regulations are a 'death knell for open science in South Africa' (Gray, 2009).

This review explores critical issues that recipients of public finance for research and development, including academics, researchers and universities, are confronted with, arising from the IPR Act. The issue is raised regarding the compatibility of the IPR Act and draft regulations with South Africa's position as a developing country. The review argues that, while the Act has many flaws and may require review, there is an opportunity for the regulations to address some of the identified weaknesses.

CONTEXT AND SCOPE OF APPLICATION

The context for the IPR Act and Regulations is the Department of Science and Technology's Ten Year Innovation Plan aimed at fostering the rise of a knowledge-based economy through innovation (DST, 2007). It seeks to grow the size and economic impact of the national innovation system, and therefore aims to maximise the commercialisation of publicly-funded research, among other measures. The legislation is also partly a response to the recommendations of a study on research utilisation, which found that utilisation of the findings of publicly-funded research was inhibited by an existing state of 'inadequate sources of knowledge or information' and 'the secrecy around intellectual property' (NACI, 2003: ix). Among the many recommendations from the study, one recommendation focused on innovation and commercialisation policies and mechanisms (ibid: 45), although the general emphasis was on incentivising research utilisation through institutional strategy and support measures, such as

1 Revised draft regulations were circulated in September 2009, but neither the April nor the September version have been formally adopted. The issues raised in this review are pertinent to both versions of the draft regulations.

encouraging formation of research networks and promoting university-industry research linkages, rather than through legislative means (ibid: 44-51).

According to the Act, 'recipients' directly impacted by the IPR Act are those persons or institutions who undertake research and development using public funding (IPR Act, 2008: s.1), including universities and statutory institutions such as the Human Sciences Research Council, Council for Scientific and Industrial Research or the Medical Research Council (MRC). The recipients are deemed to be the owners of the intellectual property (IP) arising from such research. As such, recipients are presented with significant obligations, including assessing, recording and reporting on the benefit of such research and development for society (ibid: s. 5(j)). The Act establishes the National Intellectual Property Management Office (NIPMO), responsible for protection, management and commercialisation of publicly-funded IP.

Intellectual property under the Act means any 'creation of the mind capable of being protected by law from use by any other person, in terms of South African law or foreign law, but excludes copyrighted works such as a thesis, dissertation, article, handbook or any other publication which, ..., is associated with conventional academic work' (ibid: s.1). This exclusion is important because it limits the application of the Act to the field of commercialisation.

OWNERSHIP VS PUBLIC DOMAIN

DETERMINATION OF OWNERSHIP

Recipients of public funding are required to account for their decisions regarding ownership and statutory protection of the intellectual property and to notify NIPMO accordingly. Should the recipient choose to retain ownership, then she/he has two choices – either to commercialise the research or to place it in the public domain.

Should a recipient choose not to retain ownership, then NIPMO may itself elect to acquire ownership and pursue protection of such intellectual property (IPR Act: s.4). Where NIPMO elects not to do so, the recipient may offer ownership to any private entity that provided research funding or, in the case of no such funding, ownership may be offered to the intellectual property creators, meaning the scientists and post-graduate students working in the relevant research team (ibid).

According to the Act, this is to ensure that the research and development arising from public funds is utilised and commercialised for the benefit of the people of South Africa, as opposed to being held by the recipient without the possibility of application for public benefit (IPR Act: s.2).

The question arises whether the intellectual property creators should rank last, after the recipient institution, the state and other funders, or whether the creators should rank second after the institution. A further question is whether any state can claim the capacity to engage effectively with the commercialisation of knowledge, or whether institutions and creators should be encouraged to commercialise through a range of supportive mechanisms, as envisaged in the NACI recommendations and in section 9 (4) (b) and (c) of the Act respectively, 'provide incentives to recipients and their intellectual property creators' and 'provide assistance to institutions with (i) the establishment of technology transfer offices and related capacity-building'.

PUBLIC DOMAIN

Issues of open access to knowledge and making the research output available in the public domain are not discussed in the Act, except for the limitation on publishing (IPR Act: s. 2 (1)(f)).

The draft regulations provide some consideration of this matter. Should the recipient wish to place the research output in the public domain, prior approval must be sought from NIPMO and it must be demonstrated that the intellectual property (IP) meets certain criteria for public interest as outlined in the draft regulations (IPR Regulations: s.2 (12)-(15)). Here, NIPMO makes the final decision.

Giving an institution of government the authority to approve or disapprove such choices potentially creates a bureaucratic chasm from which ineffectual decisions may emerge. How would government officials have the relevant knowledge to make decisions across a wide range of knowledge domains, even where they may call on external expertise?

Furthermore, it imposes an undue and complex burden on academics and researchers to make the case for placing their work in the public domain – a prerogative previously enjoyed by intellectual property rights holders at will and without complexity. This point is particularly important in relation to the social sciences and humanities, and the health sciences, where research is often, by definition, public interest research, for example in the field of public health. There is an attempt to address this latter question by the creation of a royalty-free right of the state (IPR Act, s.11 (1)(e) and IPR Regulations, s.8 (3)(b)). However, the current formulation does not propose open licensing, which would create open access to IP for researchers at publicly-funded institutions.

Public domain means published work that has no copyright licensing at all and the user can use this work as they choose. On the other hand, open access uses open licensing, ie it uses the copyright system to give more freedoms than what copyright offers. This is not understood in the regulations, which make reference to open source systems (IPR Regulations, s. 2 (12)). This latter approach is usually applied to software that is developed with open source code, where the requirement is that the code must always be available for sharing.

COMMERCIALISATION OF INTELLECTUAL PROPERTY

Commercialisation is defined in the Act as ‘the process by which any intellectual property emanating from publicly funded research and development is or may be adapted or used for any purpose that may provide any benefit to society or commercial use on reasonable terms’ (IPR Act 2008, s.1). Recipients are required to put in place mechanisms for protecting, developing and where applicable commercialising their IP (ibid: s.5 (1)). This includes promoting the commercialisation of the relevant intellectual property in the Republic of South Africa in the first instance, and offering preferential access to broad-based black economic empowerment (BBBEE) parties and small enterprises for the exploitation of the IP (ibid: s.11). Of interest to universities are the draft provisions for the recipient and intellectual property creators to be granted an ‘irrevocable, royalty-free personal licence’ for the purposes of research and teaching (IPR Regulations: s.2 (6)(8)). Furthermore, ‘benefit-sharing arrangements’ are envisaged between recipients and intellectual property creators (IPR Act: s.10 and IPR Regulations: s.7).

The implications of the provisions of the Act (and draft regulations) are that only recipient institutions, the state, funding organisations and creators have access to the IP. This approach excludes the concept of open innovation (Chesbrough, Vanhaverbeke & West, 2006), whereby IP may be made widely available to the broad scientific/researcher community for increasing the pace of R&D, with some reasonable limitations from a public interest perspective.

Higher education institutions are called on to establish 'technology transfer office(s)' and to develop their capacity to manage, protect and commercialise intellectual property (IPR Act, s.6). In response, the University of Cape Town is amending its intellectual property policies (UCT, no date) to correspond with its obligations under the legislation, and the University of KwaZulu-Natal has established an Intellectual Property & Technology Transfer Office (UKZN, no date). Thus the impact of the Act and regulations is far-reaching and may require the expenditure of significant resources by universities, though the value of such expenditure should be carefully considered given the varying contexts of universities with respect to the volume of potentially commercialisable research.

DEVELOPMENT CONTEXT

It is important that institutions revising intellectual property approaches and applying the decision-making powers granted under the IPR Act are cognisant of the theories and debates on intellectual property rights and access to knowledge with respect to developing countries such as South Africa. This will enable intelligent approaches to the management of intellectual property rather than mere legislative compliance. Some guidance can be taken from the Geneva Declaration on the Future of WIPO (CP Tech, 2004) signed by many scientists and academics, which highlights critical features of the access to knowledge discourse. The Declaration states that 'humanity faces a global crisis in the governance of knowledge, technology and culture' (ibid: 1). It points to the following, among others, as unfavourable intellectual property-related dispensations faced by developing countries: anti-competitive behaviour on the part of intellectual property rights-holders; barriers to 'follow-on innovation' (derivative works) by authors; and misappropriation of, and limited access to, 'social and public goods' that should be in the public domain (ibid).

In summary, the Declaration argues against a one-size-fits-all approach to intellectual property policy. The points are similar to Teljeur's argument that '[d]eveloping countries can and should have sophisticated intellectual property laws, but care needs to be taken in designing smart laws, ie laws that are firmly grounded in the framework of economic policies, provide appropriate incentives for local innovators' (Teljeur, 2003: 63).

In the recently-published South African research report African Copyright and Access to Knowledge (ACA2K) on the legal landscape impacting access to knowledge in Africa (Schonwetter, Ncube & Chetty, 2009), it is argued that a negative consequence of the IPR Act is that it prohibits the disclosure of research, while under scrutiny by bureaucrats for patentability. It is further contended in the report that this may result in significant delays in local knowledge becoming available, which is an issue of particular concern in respect of neglected diseases and other knowledge fields where local research is critical to development. An alternative approach is presented in the 'Global strategy and plan of action on public health, innovation and intellectual property' adopted by the World Health Assembly in 2008, which proposes

Promoting greater access to knowledge and technology relevant to meet public health needs of developing countries, through promoting public access to the results of government funded research, by strongly encouraging that all investigators funded by governments submit to an open access database an electronic version of their final, peer-reviewed manuscripts (WHA (2.4)(b)).

The ACA2K report recommends that a provision more conducive to promoting access to knowledge would have been that works resulting from government-funded research were mandated to be in the public domain or, alternatively, publicly available at no charge within a reasonable time frame, perhaps subject to reasonable exceptions (Schonwetter et al, 2009). This is sound advice at a time when electronic publishing opens up the possibilities of getting new knowledge into society within a very short time-span. The Geneva Declaration and the ACA2K Report advocate flexible intellectual property policies and approaches to intellectual property protection as favourable to the economic and development goals of developing countries versus a traditional protectionist intellectual property regime (CPTech, 2004; Schonwetter et al, 2009).

CONCLUSION

The responsibility on government, and therefore on researchers, to account for the use of public funds clearly requires actions that will encourage research utilisation for public benefit. Careful balancing of the rights of intellectual property owners and the benefits of broadened knowledge dissemination is necessary and called for. However, the Act may fail to support these objectives, on the grounds that it is too restrictive in its formulation of an approach to utilising intellectual property. The approach adopted appears to limit intellectual property rights and the right to commercialise to four groups, namely recipient institutions, the state, other funders and creators. This excludes those individuals or institutions in the broader national system of innovation that may have the capacity to own, protect and develop the research output through transactions with third parties.

If the concern of the policy-makers is to encourage commercialisation, or alternatively the utilisation of research for economic or public benefit, there are many possible alternatives to the approach taken in the IPR Act and Regulations. The current legislation appears to bureaucratise rather than incentivise economic and social returns on the public investment in research. It may ensue that such a policy of bureaucratisation leads to unintended consequences, including a decline in the volume of research conducted, or a decline in the volume of research made available for public benefit.

Finally, there is work to be done to align the law with the intended outcomes and to deliver a practicable, workable set of regulations. Recipients must make their views and insights known to the legislators, or face the prospect of an intellectual property regime that will in time present numerous frustrations to their central roles as producers and disseminators of knowledge. □

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