FRAMING A NATIONAL POLICY AND LEGISLATION FOR MANAGING IPR RESULTING FROM PUBLICLY FINANCED RESEARCH & DEVELOPMENT

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WIPO LIFESCIENCES SYMPOSIUM: PUBLIC SECTOR INTELLECTUAL PROPERTY MANAGEMENT
Geneva, Switzerland
15th December 2008

OVERVIEW

BACKGROUND
- Patenting trends in South Africa
- R&D Strategy – 2002
- Systemic challenges

POLICY FRAMEWORK

LEGISLATION

CONCLUDING REMARKS
BACKGROUND
Patenting by South Africans

PCT Applications: SA vs S Korea

No. Applications


Year

SA
S Korea

BACKGROUND
Patenting by South Africans

PCT patent application trends for comparator countries

No. applications


Year of Application

SA
Spain
Ireland
India
US Patents where a South African is listed as an inventor

1996-2002 US Patents by assignation

Private Individuals 19%
Private Companies 8%
Large corporates 15%
Universities 6%
Government (CSIR, WRC, SAMRC, etc) 19%
Overseas companies, HEI’s and other entities 39%

BACKGROUND
Life Sciences Patenting – SA Inventors

PATENTS (EPO, USPTO) 1991 – 2005 (2050 patents)

Universities
Sasol
Mintek
De Beers
CSIR
Publicly financed institutions accounted for about 5% of all patent applications published by the EPO, USPTO, and WIPO, which have a South African priority.
BACKGROUND
Systemic Challenges – local context

- National R&D Strategy (approved July 2002). Section 7.6 considers intellectual property issues
  
  ‘At present, there is little appreciation of intellectual property as an instrument of wealth creation in South Africa’

  - financing of patenting competes with other developmental priorities
  - need for a proper framework and enabling legislation for management of IP when this is in the national interest.

- Increased public discourse in respect of output and impact of publicly financed research and development

- No national policies are in place with negative consequences
  - Loss of intellectual property
  - Locally
  - Off-shore jurisdictions
  - Poor commercial practices
  - No balance of incentives and regulation

- R&D Expenditure per Sector 2003/4

<table>
<thead>
<tr>
<th>Sector</th>
<th>Business</th>
<th>Gov</th>
<th>HEI</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D Exp</td>
<td>55.5%</td>
<td>21.9%</td>
<td>20.5%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>
BACKGROUND
Systemic Challenges – Global context

- IPR and public funding – very dynamic
  - Universities and public research organisations are major players
  - Feature of the knowledge economy
  - Increased “intangible” content in patents
  - Patents and life forms, genetics and bioresources
  - Patents and software, business methods, etc

- Geopolitical issues
  - WIPO, WTO, etc
  - Poverty, public health and IPR

IPR POLICY FRAMEWORK
Approach

- Consistent approach required to ensure protection of intellectual property developed with public financing

- Frameworks and legislation benchmarked against good practice globally and contextualised for national and regional efficacy

- Key functions identified and responsibilities allocate

- The focus of this framework is patenting of publicly financed research
  - Sensitivities regarding academic work
  - Easier to measure
IPR POLICY FRAMEWORK

Process

- Public presentations at LES forums and other public forums
  - increase public awareness
  - Solicit both public and industry concerns

- Cabinet approval of draft policy framework

- Extensive public consultation process
  - Publicly financed institutions
  - Industry partners
  - Funding agencies
  - Other government departments with overlapping responsibilities

- Revised draft policy framework

IPR POLICY FRAMEWORK

Key Issues … 1/2

- Intellectual property (patents) must be secured on the outputs of publicly financed research
  - Obligation to disclose potential IP
  - Government can secure IP if institution does not

- Obligations and benefits are linked
  - Ownership
  - Obligation to commercialise

- Individuals and institutions have defined rights
  - Ownership
  - Benefit sharing
IPR POLICY FRAMEWORK

Key Issues…2/2

- Certain patents can be secured to protect public interest and will not be licensed on commercial terms

- Preferences in commercialisation
  - non-exclusive licensing
  - local licensing
  - SMMEs and BEEs as licensors

- Government has walk-in rights on publicly financed IP in the national interest – free licence

- Revenue to institutions will grow but it is not expected to be a major source of finance at the system level

IPR FROM PUBLICLY FINANCED RESEARCH AND DEVELOPMENT BILL

Towards an enabling legislative framework

- R&D Strategy 2002
- Draft IPR Policy Framework 2006
- IPR Policy Framework 2007
- Draft IPR Bill: May 2007
- IPR Bill: August 2008
- IPR Bill: 18 Nov 2008
IPR BILL Process

Public Comments
- REVIEW OF PUBLIC COMMENTS
  - August 2007 - December 2007
- BILL REDRAFTING
  - February 2008
- INTERN BENCHMARK
  - March 2008
- WORKSHOP WITH STAKEHOLDER GROUP

CABINET APPROVAL
- 14/5/08
  - 6th June 2008

CERTIFICATION
- STATE LAW
  - ADVISORS

PUBLIC HEARINGS
- Joint seating of Portfolio Committee on S&T and Select Committee on Education & Recreation (NCOP)
  - 29 – 30th July 2008

IPR BILL Main Object

“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, whether it be for a social, economic, military or any other benefit”
1. Consistent approach in protection of IP developed with public funds
2. Benchmark against good global practice and contextualise for local efficacy
3. Identify key rights, functions & obligations
4. Good balance between incentives and control
5. Certainty in terms of publicly financed IP
6. Must not hinder private-public collaborations

- **RECIPIENT:** Universities, Research Institutes, Small Businesses
  - have title to inventions developed with public funds and must obtain statutory protection (where applicable)

- **National IP Management Office (NIPMO)**
  - Only where Recipient elects not to take title
  - Only where State will be prejudiced

- **Private Sector partner / IP creator**
  - Where NIPMO elects not to take title
Establishes NIPMO as an agency function under the Department of Science and Technology

- Administrative Role
- Facilitating and capacity development
- Guidelines on transactions and related matters
- Intellectual property fund management

Designated function of Office of Technology Transfer (OTT) at Institutions

- Regional OTTs may be established
- Mix of skills and interdisciplinary knowledge and expertise in IP protection, commercialisation, and entrepreneurship
- Various aspects relating to identification, protection and commercialisation of IP
IPR BILL
Institutional Arrangements

<table>
<thead>
<tr>
<th>INSTITUTION</th>
<th>IP Policy</th>
<th>Tech Transfer Capacity (Year Established)</th>
<th>INSTITUTION</th>
<th>IP Policy</th>
<th>Tech Transfer Capacity (Year Established)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhodes University</td>
<td>Yes</td>
<td>No</td>
<td>University of Limpopo</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Walter Sisulu Metropolitan University</td>
<td>Yes</td>
<td>No</td>
<td>University of Technology</td>
<td>Yes</td>
<td>Limited (2005)</td>
</tr>
<tr>
<td>Durban University of Technology</td>
<td>No</td>
<td>No</td>
<td>University of KwaZulu-Natal</td>
<td>No</td>
<td>In process of establishment</td>
</tr>
<tr>
<td>University of Fort Hare</td>
<td>No</td>
<td>No</td>
<td>UNISA</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Cape Peninsula University of Technology</td>
<td>No</td>
<td>No</td>
<td>University of Western Cape</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Vaal University of Technology</td>
<td>No</td>
<td>No</td>
<td>CSIR</td>
<td>Yes</td>
<td>Yes (2001)</td>
</tr>
<tr>
<td>Central University of Technology</td>
<td>No</td>
<td>No</td>
<td>University of Fort Hare</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Mangosuthu University of Technology</td>
<td>No</td>
<td>No</td>
<td>University of Zululand</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Vaal University of Technology</td>
<td>No</td>
<td>No</td>
<td>Agricultural Research Council (ARC)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Medical Research Council (MRC)</td>
<td>Yes</td>
<td>Yes (2004)</td>
<td>Mintel</td>
<td>Yes</td>
<td>Limited</td>
</tr>
</tbody>
</table>

From: M. Sibanda, Intellectual property, commercialisation and institutional arrangements at South African Publicly Financed Institutions, WIPO Economics of IP, 2008, in print

IPR BILL
Benefit Sharing

- IP creators and heirs at institutions

  "Intellectual property creators at an institution and their heirs are entitled to the following benefit sharing:

  a) at least 20 per cent of the revenues accruing to the institution from such intellectual property for the first one million rand of revenues, or such higher amount as the Minister may prescribe; and

  b) thereafter, at least 30 per cent of the nett revenues accruing to the institution from such intellectual property"
IPR BILL
IP Transactions

- IP Transactions: (i) licence; (ii) assignment

- Recipient empowered to conclude transactions on best terms
  - Assignment - an exception rather than a rule
  - Exclusive licence – appropriate performance clauses
  - Off-shore exclusive licence and assignments – benefit to the Republic and subject to regulations
  - Preferences to South Africa (priority Black-owned and Small Businesses)

IPR BILL
Rights of the State

- Each IP Transaction Agreement to grant the State
  “An irrevocable and royalty-free licence authorising the State to use or have the intellectual property used throughout the world for the health, security, and emergency needs of Republic”

- Walk-in rights - in following circumstances:
  1. Failure to disclose
     - Fatal and results in assignment of IP to State
  2. Non-use:
     - specific consultative process with NIPMO
     - non-exclusive licence to third parties willing and able to commercialise
**IPR BILL**

**Co-Financed Research**

- **Default position - IP owned by the institution**
  - Option to an exclusive licence
  - Capacity to manage and commercialize the IP in a manner that benefits the Republic
  - Performance clauses in exclusive licence agreement
  - Could be assigned in exceptional cases

- **Co-ownership of IP requires:**
  - joint IP creatorship; and
  - contribution of resources (e.g. include background IP); and
  - appropriate benefit sharing arrangements for IP creators; and
  - agreement for commercialization of IP

**IPR BILL**

**Full Cost Basis (FCB) Funded Research**

- **Research and Development funded on FCB**
  - NOT publicly financed
  - Legislation does not apply except to define FCB

- **Full Cost Basis**
  - Direct AND Indirect costs of research and development
  - More defined in Regulations
    - NIPMO and Recipient institutions to agree on matrices to be used
    - Variations
      - institution to institution
      - faculty to faculty / business unit to business unit
CONCLUDING REMARKS

- **Access and availability of products from publicly financed research**
  - Very specific and broad language in IPR Policy Framework
  - Broad language in IP legislation
  - Specific provisions in the legislation
  - By disclosure obligation increasing likelihood that research results could have impact on society

- **Consultative process essential**
  - Be patient, understand the concerns – use external advice
  - Be less prescriptive, yet clear on ownership, obligations, duties, incentives, consequences, and rights of the State

THANK YOU