

# *Policy development relating to IPR in the context of Publicly Funded Research in South Africa*



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*Towards an African Digital Information Commons Conference*

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## *Presentation Outline*

- Outline of Dept of Science and Technology efforts (new policy framework and legislation) on IPR and Public Funded Research – focus on enriching the Patenting Culture
- Highlight how the proposed framework accommodates for patenting in the content of Open Access/Open Source Initiatives (E-Research, Site Licensing, SMME and enterprise innovation, socio-economic development imperatives, shift from product-based to service-based economy)
- Explore IPR and Patents within the concept of Commons in terms of social economic challenges (rights of government in context of public funded research, rights of research institutions)





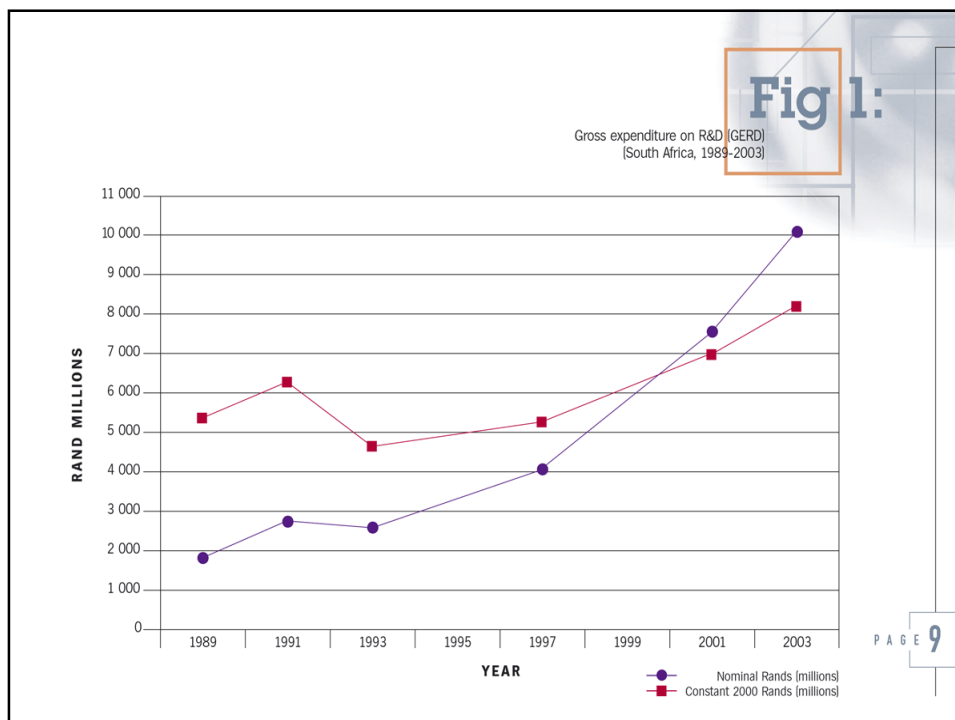
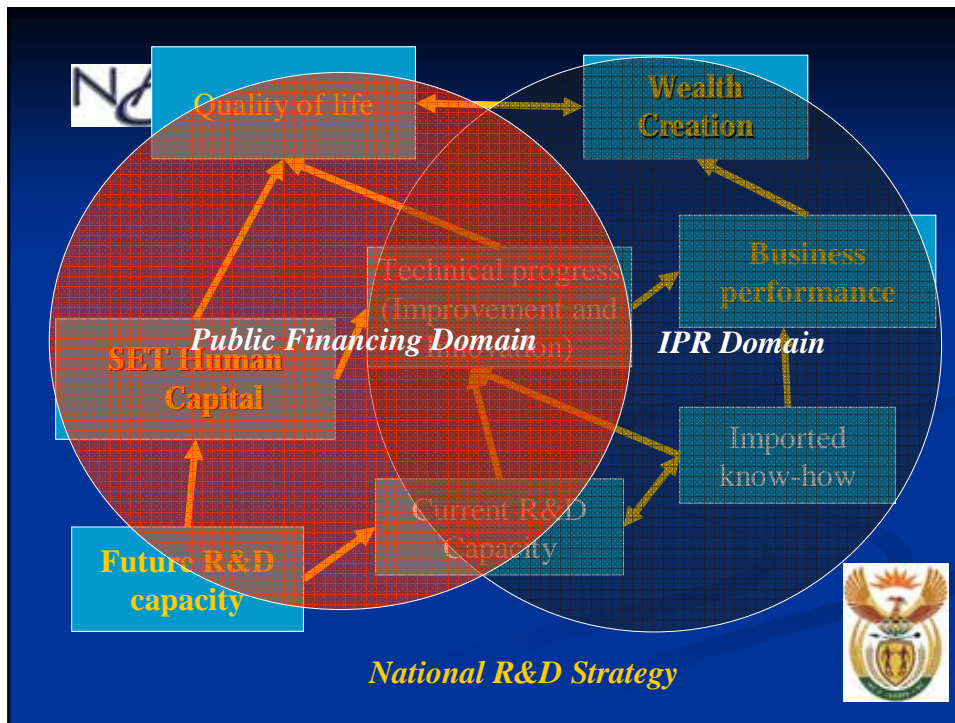
## ***Patenting as a feature of developmental divides***

- **Participation in the patent system has major barriers for developing countries**
  - *Legal support and advice in country*
  - *Very high costs in translation, specific country filings*
  - *Non-examination “character” of many developing country Patent Offices*
  - *National policies may not emphasize protection of “own” intellectual property*



<b>Country</b>	<b>Patents per million of population (1998)</b>
<b>Japan</b>	994
<b>Netherlands</b>	189
<b>United States</b>	289
<b>Mexico</b>	1
<b>Brazil</b>	2
<b>South Africa</b>	2.5
<b>India</b>	1
<b>Most African Countries</b>	<1 or no data





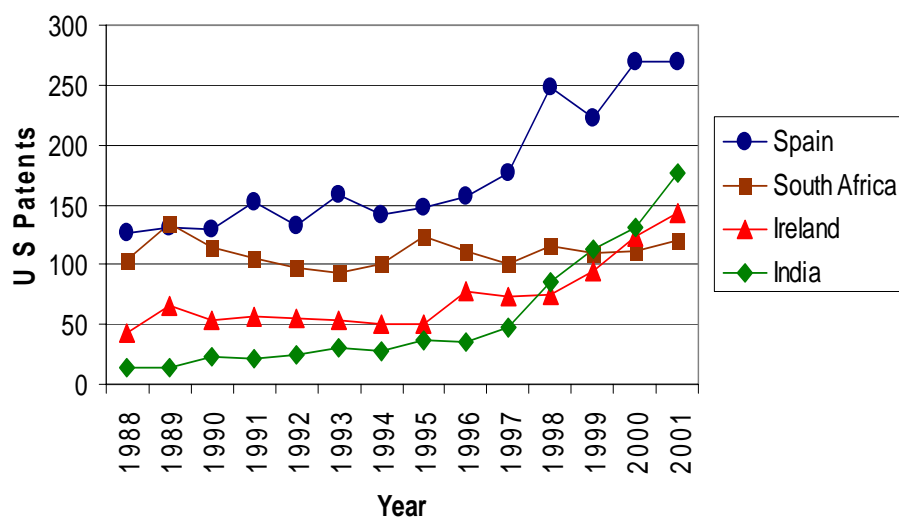


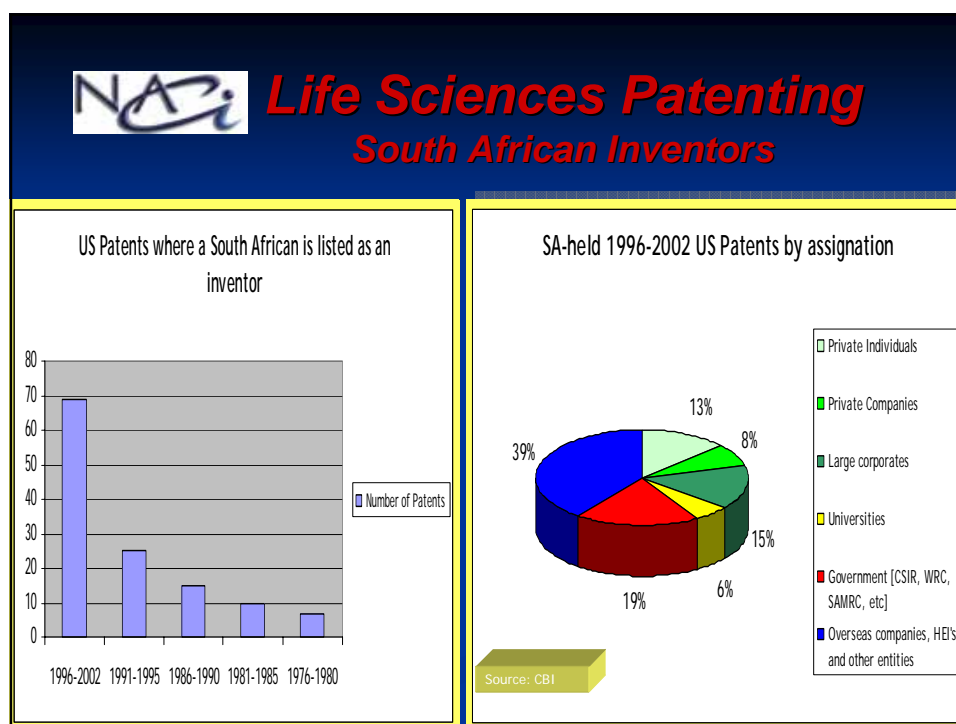
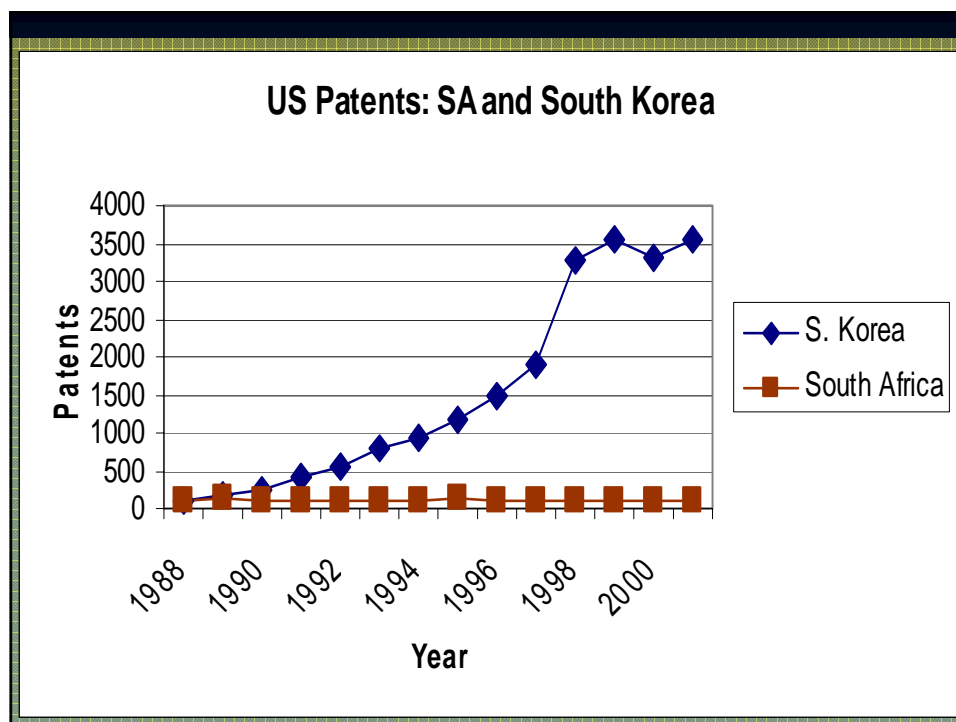
## *How “big” is the SA system*

- Global “power”: who uses our CIPRO?  
Comparator countries
- Attractiveness of local ownership
- Dominated by inward patenting
- Little social capital associated with patenting



US patent trends for comparator countries







## ***Policy Issues***

- Intellectual property should be secured on the outputs of publicly financed research (focus is on patenting)
- Preference for non-exclusive licensing
- Preference for South African companies
- Preference for local licensing
- Preference for SMMEs and BEEs as licensors
- Benefit sharing with inventors defined
- Special provisions for R&D committed private sector companies



## ***Policy Issues***

- Government to have “*walk-in rights*” on IP in the national interest
- Government could secure IP if institution does not
- Obligations and benefits to accrue to the *institution* that is publicly financed
- Revenue to institutions will grow but it is not expected to be a major source of finance at the system level





## *Issues*

### ■ **Agency**

- An agency (or agencies) for managing the disclosure process and for reporting

### ■ **Employees, students, contactors**

- An obligation to disclose potential IP developed in the course of publicly financed research



## *The Private Sector*

- Move beyond the “funding = ownership” paradigm
- Major funders of research in Universities in SA
- Increased global awareness of local companies
- Provision will be made for protection of interests of major funders of public institution R&D by private sector
- Also for “start-ups” to protect proprietary positions
- ..but, performance will be a requirement if public funds were involved....
- ...and, benefit sharing (with inventors) will be locked in (independent of jurisdiction)
- Follows approach of the “Berlin Contract” (institutional focus) rather than Bayh-Dole





## ***Objectives of proposed policy***

- **Clarity, transparency and consistency will lead to enhanced activity**
- **Obligations and benefits are linked**
- **Individuals and institutions have defined rights**
- **Revenue opportunities for institutions**
- **Government has defined relationship to innovators and institutions it finances**



## ***Global Practice***

- **Developed country approaches**
- **Economies in transition (India and Open Access/Open Source Advantage)**
- **Developing world (Socio-Economic Challenges and importance of E-Research and Digital Information Commons)**







## ***The Commons***

- OECD questions the flexibility of patent systems and software and business methods in the context of innovation and technology diffusion (*OECD 2004/01 Report of Patents and Economic Performance*)
- Exclusive rights by patent holders and the access to basic technologies and research tools? Strategic patenting behaviour amongst software and ICT firms (bargaining chip) – relevancy for emerging and developing countries?
- Open Source Approach helps disclosure. Rewards to open source innovation have been mostly non-monetary (e.g. reputation) or based on the provision of complementary services (customisation, support). Can patent protection could be useful to open source software developers in creating sustainable business models while guaranteeing the disclosure of source code?
- Open Source yields capital goods at a lower price for capital formation (e.g. in India and the software industry). A level playing field among software companies.



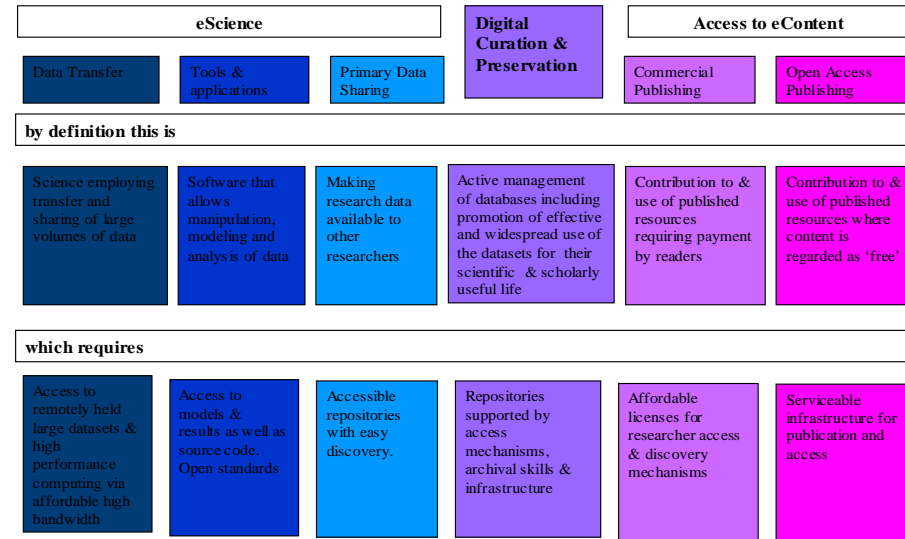
## ***South African Govt Initiatives towards Information Commons***

- *E-Research Support Services (SARIS Project)*: rapid and cost-effective access to scientific communication in the broadest sense, shared facilities for high performance and data interchange in a global network, enhancing the NSI, commercial and open eContent access. Two main entities (Tertiary Education Network and SARIMA)
- *South African Site Licensing Initiative (SASLI)*: all consortia could benefit from service and expertise of a centralised office and coordinated site licensing activities (grant from the Open Society Initiative) - a focus on academic libraries and science councils. Maximise SA's status in improving the use and availability of networked information (services and value for money models, regional initiatives)



**SARIS Project Report for DST (January 2005)**

**Components of eResearch**



**Researcher Requires:** Perpetual access, Curation, Training, Marketing

**Supplier must ensure:** Security - Access, Authorization, Authentication



***Initiatives (continued)...***

• **Policy position in the framework:** not securing enough on Public Funded Research and OECD current position on Open Access to Research Data – in the context of the Commons there needs to be flexibility on data and software in terms of Open Access in the context of the NSI, cost structures in developing countries, and economic development

• ***NACI and Meraka proposal*** on Open Software and Open Standards in South Africa – a Critical Issues for Addressing the Digital Divide. A practical vision of the benefits of open source in South Africa (value chain management, expansion of the software market 'cake' in the services area, lower entry barriers for emerging businesses, ICT education)

• **Policy also focuses on patenting in the context of public interest** (another take on the commons – Gvt step in rights)

• **Open Source = incremental innovation to result in customisation and enhancement of services**





## ***Strengthening the NSI***

- **Strengthen incentives**
- **Although “it is not just about patents”  
without secure IP “its not about anything at  
all”**
- **Build capacity in innovation support  
holistically**
- **Have a clear stable policy regime**
- **....that is globally robust**

