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GUIDELINE 3.5 OF 2019

GUIDELINES FOR THE OPERATION OF INCENTIVES FOR INTELLECTUAL PROPERTY CREATORS

OVERVIEW

The Intellectual Property Rights from Publicly Financed Research and Development Act (IPR Act) No. 51 of 2008 came into effect on 2 August 2010.

The aim of "Guideline 3.5 of 2019: Operation of the Incentive Scheme for Intellectual Property Creators" (Guideline) is an update on Guideline 3.4 of 2018 which sets out the terms and conditions for the provision of incentives as per the mandate articulated in Section 9(4)(b) which states:

"NIPMO must, furthermore....(b) provide incentives to recipients and their intellectual property creators, to reward them for proactively securing protection for intellectual property and commercialising it and, generally, for promoting innovation." [own emphasis added]

This Guideline seeks to provide for NIPMO incentives for Intellectual Property (IP) Creators in an effort to promote the conversion of research and development (R&D) outputs into products, processes and services that are of benefit to society. Furthermore, this Guideline provides a comprehensive summary of all incentives, of which NIPMO is aware, which are available within the South African system for IP Creators/ their institutions.

Please do not hesitate to contact Ms Paballo Phiri (<u>paballo.phiri@nipmo.org.za</u>; 012 844 0266) should you have any questions with regards to any matter in this Guideline.

DR KERRY FAUL HEAD: NIPMO

DATE: 1 March 2019

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1. LIST OF ACRONYMS USED

CIPC	Companies and Intellectual Property Commission				
DAFF	Department of Agriculture, Forestry and Fisheries				
DHET	Department of Higher Education and Training				
DST	Department of Science and Technology				
HEI	Higher Education Institution				
IP	Intellectual Property (see IPR Act and Guideline 1.2 of 2018)				
IPR	Intellectual Property Rights (see Guideline 1.2 of 2018)				
IPR Act	Intellectual Property Rights from Publicly Financed Research and Development Act (No. 51 of 2008)				
NIPMO	National Intellectual Property Management Office				
NRF	National Research Foundation				
NSTF	National Science and Technology Forum				
ОТТ	Office of Technology Transfer				
PBR	Plant Breeders' Right				
R&D	Research and Development (see Guideline 1.2 of 2018)				
SAWISA	Southern African Women in Science Awards				

2. LIST OF DEFINITIONS USED

Absolute Novelty	Means the state of the art comprises everything made available to the public anywhere in the world by means of a written or oral description, by use, or in any other way, before the date of filing or priority ¹ .
Actionable disclosure	Means a disclosure which the institution acts on, for example by filing for statutory IP protection, bringing IP rights under institutional management, or which otherwise remains active because future action is expected following receipt of the disclosure. Actionable disclosures are reported to NIPMO under Group 3 and non-actionable under Group 4 – See Practice Note 5.1 of 2018.
"Benefit and Impact" Stage	Means that stage in the innovation value chain where products, processes and services are finding impact in the market and/or society and benefit (financial or non-financial) is being derived.
Benefit sharing	Means the share of the revenue that accrues to an institution which is distributed to the IP Creators and their heirs.
Disclosure	Means the provision of full details of potential intellectual property contemplated in section 5 of the IPR Act (as defined in section 1 of the IPR Act).
Incentive	Means "(a) a thing that motivates or encourages someone to do something. (b) a payment or concession to stimulate greater output or investment" ² .
Institution	Means higher education institutions (26) and schedule 1 institutions (11).
Intellectual Property Creator	Means the person involved in the conception of intellectual property and identifiable as such for the purposes of obtaining statutory protection and enforcement of intellectual property rights, where applicable.
Radical Innovation	Means an innovation that results in a significant impact on a market and on the economic activity of firms in that market.
Revenue	Means all income and benefits, including non-monetary benefits, emanating from intellectual property transactions. It includes all actual, non-refundable royalties, other grant of rights and other payments made to the institution or any other entity owned wholly or in part by an institution as a consideration in respect of an intellectual property transaction, but excludes a donation and "gross revenues" shall have a corresponding meaning.
SMME	Means a Small, Micro and Medium Enterprise which is operating as a business for profit, defined as having an annual turnover of less than R100 million over the last 3 years.
"Stamina" Stage	Means that part of the innovation value chain where an end is not in sight, funding is being sought, a prototype or the like developed, markets being sought, and/or no exclusionary intellectual property

¹ https://www.epo.org/applying/european/Guide-for-applicants/html/e/ga_b_ii_1.html ² https://dictionary.cambridge.org/dictionary/english/incentive

right granted yet.		right granted yet.
"Tipping Stage	Point"	Means that point when a researcher elects to make a disclosure to the OTT before publishing his/her research findings in a journal and where, after assessment, the OTT deems the disclosure actionable.

3. FIGURES

Figure 1: Typical innovation value chain from research and development within an institution .. 7

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5. CONTEXT

State (government) funding and public research institutions (collectively "institutions" comprising higher education institutions and schedule 1 institutions in the South African context) are acknowledged globally as integral contributors to radical innovation. In fact, Mariana Mazzucato goes so far as to say "there is not a single key technology behind the iPhone that has not been State-funded."³

Yet it is also a well-known and globally recognised fact that the majority of researchers value, publications in impact-rated peer-review journals, and indeed many incentive systems reward this. The rewards and incentives for following a research agenda which has application in industry and/or society in terms of tangible products, processes and services appears to be suboptimal. The latter will be referred to hereon in as the "Innovation agenda".

Although there are international best practices/ interventions in place to enhance and upscale an innovation agenda, few appear to operate on a truly national level with recognition coming from national government for the creativity expressed by researchers in the public domain. This guideline thus seeks to draw on a range of financial and non-financial incentives in order to make an innovation agenda increasingly attractive.

6. STRATEGICALLY PLACED INCENTIVES ALONG THE INNOVATION VALUE CHAIN TO DRIVE THE INNOVATION AGENDA

The innovation value chain that typically operates within an institution starts at ideation/knowledge creation (Figure 1: Typical innovation value chain from research and development within an institution. The new intellectual property (IP) creation is then disclosed to the Office of Technology Transfer (OTT) by the IP Creator where an assessment of the disclosure is made on a number of aspects (including novelty, market assessment and freedom to operate) before the disclosure is deemed actionable and taken onto an institutions portfolio or deemed non-actionable and no further action is taken. This stage is referred to as the "Tipping Point" in the context of this Guideline.

Following the Tipping Point an actionable disclosure may go through one or more stages/ steps which will include an assessment for novelty and a determination of the most appropriate form of intellectual property rights that should be obtained for the disclosure. This work is typically conducted by the OTT with inputs required from the IP Creators when it comes to securing IP rights (such as responding to an official examination during substantive examination of a patent application). This stage will also include further development/ refinement of the technology and is accompanied by the need for funding as well as a clearer understanding of the market accessibility, readiness and economic feasibility of the product, process of service. This stage is referred to as "Stamina" in the context of this Guideline.

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³ Mariana Mazzucato, The Entrepreneurial State: Debunking Public vs. Private Sector Myths

Once IP rights have been secured (i.e. a granted patent for example), the technology needs to be deployed for use to an existing company or a start-up company. The arrangement between the institution and the company is contractually regulated and can be through access to the IP and/or technology through a licensing arrangement or through an outright sale (assignment). Either arrangement typically happen with a monetary value associated with it (but that does not have to be the case) and this would activate the benefit sharing arrangements. This stage is referred to as "Benefit and Impact" in the context of this Guideline.

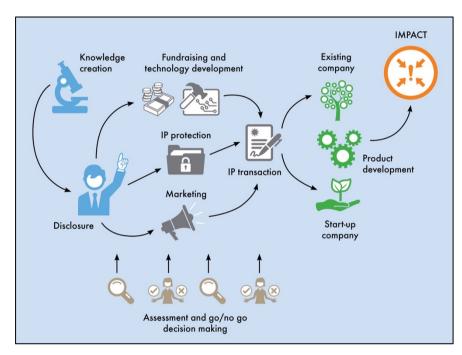


Figure 1: Typical innovation value chain from research and development within an institution⁴

It is noted that the innovation value chain is not linear, not predictable and does not follow a set formula but instead may include many feedback loops and hence the assessment for go/no go decision making is critical.

The incentives offered along the innovation value chain are presented below and categorised as incentives that fall within the "Tipping point", "Stamina" or "Benefit and Impact" stages and summarised in the table (<u>Table 1</u>) below:

Table 1: Summary of incentives within the scope of this Guideline

	INCENTIVE									
	Tipping Point		St	amina			Benefit	and I	mpact	
1.	NIPMO - Actionable	1.	NIPMO	Certifica	te of	1.	NIPMO	and	IPR	Act
	Disclosures [6.1.1]		Recognit	ion (SA	patent		Benefit S	Sharin	g [6.3. ⁻	1]
			and PBR) [6.2.1]						
2.	NRF Rating [6.1.2]	2.	DHET	Creative	and	2.	NIPMO		Innova	ation
			Innovatio	n Outputs	[6.2.2]		Awards	at	SAV	ViSA
							[6.3.2]			
									_	
		3.	NRF Rati	ng [6.2.3]		3.	NIPMO		Innova	
							Awards	at NS	TF [6.3	5.3]

⁴ South African National Survey of Intellectual Property and Technology Transfer at Publicly Funded Research Institutions. Baseline Survey Study: 2008-2014 [http://www.hsrc.ac.za/en/departments/cestii/intellectual-property-tech-survey]

6.1 "TIPPING POINT"

Within the stage of "Tipping Point", incentives are in place and offered by (a) NIPMO, and (b) the National Research Foundation (NRF).

- (a) NIPMO Tipping Point Incentive acknowledges each institutions' IP Creator(s) for actionable disclosures made to their OTT. The top IP Creator(s) will be awarded a certificate of acknowledgement for their role in contributing to an innovation agenda with the goal of contributing to "The outcomes approach" and alleviating the triple challenges identified in the National Development Plan (NDP) of poverty, inequality and unemployment, amongst others. The OTT, provided minimum compliance with the requirements of the IPR Act, will be granted a once-off financial award which is to be exclusively used to advance the IP disclosures by the top IP Creators(s) to the next stage along the innovation value chain.
- (b) NRF "Tipping Point" rating incentive acknowledges researchers for publications in scientific journals that have rigorous editorial and refereeing policies. Other research outputs, such as registered patents and refereed conference proceedings will be treated on their merits. Researchers receive a **rating** in one of five (5) categories

Section 6.1.1 below sets out the requirements of this incentive.

year period.

Section 6.1.2 below sets out the requirements for this incentive in summary format.

For the full details go to https://www.nrf.ac.za/rating.

(A, B, C, P and Y) based, primarily, on their publications over the previous eight (8)

Currently the NRF incentive primarily functions as a tipping point incentive driving research into publications, but as registered patents are also acknowledged it may also, to a lesser extent, function as a "Stamina" incentive [see section 6.2.3 below].

6.1.1 NIPMO "Tipping Point" Incentive - The actionable disclosure vs the publication

In order to follow an "innovation agenda", and in particular if exclusionary IPR are crucial for commercial success, the research outputs may not be released into the public domain in any way, shape or form before an application for IP protection, such as a patent application, is filed. This is due to one of the intrinsic requirements for IP protection, and in particular patent protection, being absolute novelty. Thus, if research outputs are

⁵ https://www.gov.za/issues/outcomes-approach. This is a direct result of the ruling party's election mandate and includes 12 outcomes namely: Outcome 1: Improved quality of basic education; Outcome 2: A long and healthy life for all South Africans; Outcome 3: All people in South Africa are and feel safe; Outcome 4: Decent employment through inclusive economic growth; Outcome 5: A skilled and capable workforce to support an inclusive growth path; Outcome 6: An efficient, competitive and responsive economic infrastructure network; Outcome 7: Vibrant, equitable and sustainable rural communities with food security for all; Outcome 8: Sustainable human settlements and improved quality of household life; Outcome 9: A responsive, accountable, effective and efficient local government system; Outcome 10: Environmental assets and natural resources that are well protected and continually enhanced; Outcome 11: Create a better South Africa and contribute to a better and safer Africa and World; Outcome 12: An efficient, effective and development oriented public service and an empowered, fair and inclusive citizenship.

published in a journal, for example, the novelty of the invention would have been destroyed and IPR may no longer be applied for.

Section 5(1)(c) of the IPR Act mandates that "personnel involved with the research and development make a disclosure to it within 90 days or such longer period, as may be prescribed, of identification by such personnel of possible intellectual property and before the intellectual property is made public". The IPR Act (Section 2(2)(f) provides clearly for IP protection and publication to go hand-in-hand stating "following the evaluation of a disclosure, researchers may publish their research findings for the public good".

Currently there is no incentive within the South African system on a national level that looks at the point of publication and provides a complementary action to publication through the making of a disclosure to the OTT. Once the disclosure has been assessed for potential, it will be deemed actionable and appropriate protection sought or returned to the inventor as non-actionable. Whether deemed actionable or non-actionable, the research can now be published or presented at a conference *etcetera*. In the context of this guideline the ability to create an incentive to encourage a researcher to make a disclosure before releasing the information into the public domain, is regarded as the tipping point as it kick starts the "innovation agenda" journey.

6.1.1.1 The What and When

The NIPMO "tipping point" incentive seeks to retrospectively award the top IP Creator(s) for making actionable disclosures of potential IP to their OTT.

Following an evaluation of a disclosure made by a researcher, OTTs will make a determination as to whether the disclosure has commercial and/or social impact potential. If potential is determined, the disclosure is deemed to be actionable and taken onto an institution's IP Portfolio. The IPR Act (Section 5(1)(h)) then mandates that institutions must "report to NIPMO twice a year and as provided for in this Act, on all matters pertaining to the intellectual property contemplated in this Act, including all intellectual property from which it elects to obtain statutory protection and the state of commercialisation thereof, in a manner stipulated by NIPMO." The biannual reports are made to NIPMO on an IP7 disclosure form ("Intellectual Property Status and Commercialisation" Report) as per the requirements set out in Practice Note 5.1 of 2018.

NIPMO thus manages a database of all IP emanating from publicly financed research and development (R&D), with the progress in IP prosecution status, from under evaluation to disclosed and protected, and the commercialisation status, from licensed to commercialised, tracked biannually. This database has been growing biannually since 2 August 2010 when the IPR Act came into effect. The table (

<u>Table 2</u>) below shows the annual submission of new IP7 forms received from institutions from 1 April 2011 to 31 March 2018.

Table 2: Number of new disclosures submitted annually by institutions

Year	Number of actionable disclosures received from institutions (n=number of institutions who reported)
2011/12	96 (n = 10)
2012/13	198 (n = 21)
2013/14	278 (n = 23)
2014/15	252 (n = 23)
2015/16	279 (n = 24)
2016/17	251 (n = 24)
2017/18	239 (n = 22)

As the support (financial and other) to institutions to establish a legislatively mandated OTT has been amplified, the OTTs have increasingly been able to grow the size of the office with suitably skilled individuals, and hence increasingly receive and analyse disclosures, from 96 received in 2011/12 to over 250 received each year since between 2014/15 and 2016/17.

6.1.1.2 The Who and How

For the 2018/19 financial period NIPMO has deemed it appropriate to retrospectively award the top IP Creator(s) who, in the absence of an incentive to make a disclosure, actively engaged in the innovation agenda by doing R&D that resulted in IP with commercial and/or social impact potential which was disclosed to the researchers' OTT. The top IP Creator(s) will receive a Certificate of Acknowledgement as the top IP Creator(s) for their institution. The top IP Creator(s) per institution that have made the most actionable disclosures over the period 1 April 2011 to 31 March 2018 will be identified from the NIPMO database based on the number of new actionable disclosures received with a unique IP7 reference number bearing in that:

- a. The IP Creator(s) must be employed at the institution on a full-time, part-time or contract appointment or the like, at the time of making the disclosure(s) to the OTT.
- b. Should the IP Creator have left the institution, his/her contribution will still be acknowledged through the award of Certificate of Acknowledgement.
- c. Should the IP Creator be deceased, his/her will be awarded a Certificate of Acknowledgement posthumously.

The identified IP Creators will be cross-referenced with an independent submission made by the institution of their top IP Creator(s) based on the greatest number of actionable disclosures received.

The OTT will be awarded a **once-off financial award** which is to be exclusively used to advance the IP disclosures by the top IP Creators(s) to the next stage along the innovation value chain bearing in mind that:

a. the institution must have met the minimum compliance requirements in terms of the IPR Act (biannual disclosures; an approved IP Policy, and approved IP9 indirect cost recovery rate); and b. At least one (1) IP Creator must be at the institution to champion the commercialisation of the technology which is described in the actionable disclosure.

Should the institution not be compliant with these minimum requirements, then the institution's OTT will not receive the financial incentive, however, the IP Creator(s) will still be awarded the Certificate of Acknowledgement.

Where the institution is compliant, the institution will enter into a contract with the DST/NIPMO for the financial incentive, to be determined by and subject to availability of funding by National Treasury, for the OTT to deploy in advancing the technology along the innovation value chain. Where more than one technology has been disclosed by one or more IP Creator(s) of a **single** research group, the OTT and the IP Creator(s) will determine together which technology the financial incentive should be applied to. Where one or more IP Creators are from **different** research groups but have the same number of actionable disclosures; the financial incentive will be divided equally between the different research groups to advance the technology of each research group, unless agreed otherwise. This arrangement will be agreed to in writing by the parties and will form part of the contractual commitment.

NIPMO reserves the right to make the final determination.

6.1.2 National Research Foundation (NRF) "Tipping Point" incentives awards IP Creators

6.1.2.1 The What

The NRF rating system is regarded as "a key driver in the NRF's aim to build a globally competitive science system in South Africa" and as such the most significant outputs will be refereed papers in scientific journals that have rigorous editorial and refereeing policies. Publications such as a review in a high-profile journal, or a book or chapter in a book aimed at the research community are also important. In addition to published outputs, the standing of a researcher, such as through, an invitation to give talks at conferences, or to be a member of an editorial boards is important. IIP outputs, especially, patents are assessed on their merit and don't feature prominently in the rating system⁶.

6.1.2.2 The Who

The rating of individuals (researchers) is based primarily on the quality and impact of their research outputs over the past eight years, taking into consideration the evaluation made by local and international peers.

The outcomes of the NRF evaluation and rating process is often used by institutions to position themselves as research-intensive institutions, while others provide incentives for

⁶ It should be noted that one can protect intellectual property and publish in an ISI-rated peer-reviewed journal. One must just protect the intellectual property <u>first</u> through filing an application before disclosing the research outputs into the public domain through presenting at a conference or publication in a journal.

their staff members to acquire and maintain a rating and give special recognition to toprated researchers.

The ratings that are awarded fall within the following categories:

- A Leading international researchers
- B Internationally acclaimed researchers
- C Established researchers
- P Prestigious Awards
- Y Promising young researchers⁷

6.1.2.3 The How

To apply to be a rated researcher, an application form needs to be completed which can be found at https://nrfsubmission.nrf.ac.za/NrfMkII/.

All applications received are assessed by a specialist committee (of which there are 27) followed by an Executive Evaluation Committee. An Appeals Committee is in place should any applicant feel the merits of their application should be reconsidered. The rating process is co-ordinated by members of academia.

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⁷ https://www.nrf.ac.za/rating

6.2 "STAMINA"

Within the stage of "Stamina", incentives are in place and offered by (a) NIPMO, the (b) Department of Higher Education and Training (DHET) and the (c) National Research Foundation (NRF).

- (a) The NIPMO "Stamina" incentives rewards IP Creators who are listed as inventors or breeders, for obtaining a granted patent at the South African Companies and Intellectual Property Commission (CIPC) or a granted plant breeders' right (PBR) which is given by the registrar of South African Department of Agriculture, Forestry and Fisheries (DAFF). This reward is in the form of a Certificate of Recognition.
 - Section 6.2.1 below sets out the requirements for this incentive.
- (b) The DHET "Stamina" incentives awards IP Creators who are listed as inventors or breeders, for obtaining the first granted patent of a patent family in a jurisdiction that does substantive examination or a granted plant breeders' right (PBR) in the first jurisdiction that grants such right. This award is in the form of units to which a monetary value is associated and which is paid over to the institution for use as the institution deems fit.
 - Section 6.2.2 below sets out the requirements for this incentive in summary format. For the full text go to National Gazette No. 40819, 27 April 2017, No 395, Vol. 622, page 4.
- (c) National Research Foundation "Stamina" incentives awards IP creators who have a granted patent, as a secondary output.
 - Section 6.2.3 sets out the requirements for this incentive in summary format. For the full details go to https://www.nrf.ac.za/rating.

6.2.1 NIPMO "Stamina" Incentive

6.2.1.1 The What and when

6.2.1.1.1 Patents

The NIPMO "Stamina" incentive is applicable to each granted South African patent, which cites an HEI and/or a Schedule 1 Institution, as patentee/ co-patentee, assignee/ co-assignee of the invention claimed in the granted patent. The incentive aims to recognise and acknowledge individual inventors at eligible HEIs and/or a Schedule 1 Institution that have rights to granted patent(s) during the previous calendar year, i.e. for patents granted during the period 1 January to 31 December.

6.2.1.1.2 PBRs

The NIPMO "Stamina" incentive is also applicable to each granted South African PBR, which cites an HEI and/or a Schedule 1 Institution as an applicant, breeder or holder of such granted PBR. The incentive recognises and acknowledges individual breeders at

eligible HEIs and/or Schedule 1 Institution that have rights to granted PBR's during the calendar year, i.e. for PBRs granted during the period 1 January to 31 December.

6.2.1.2 The Who

An inventor(s) or breeder(s), at an HEI and/or Schedule 1 Institution will, subject to compliance to the conditions set out hereunder, be awarded a Certificate of Recognition, acknowledging their contribution to the invention/ new plant variety that is the subject of the granted patent right or plant breeders' right, respectively.

6.2.1.3 The How

NIPMO will through the Offices of Technology Transfer (OTTs), where available, otherwise, through the Office of the Deputy Vice-Chancellor for Research or similar, who will ensure that the inventor(s) or breeder(s) receive the Certificate.

6.2.1.3.1 Patents

The HEI and/or Schedule 1 Institution shall, where a patent application has been granted, certify that they are satisfied that the inventors are indeed the complete set of inventors for the patent and that each cited inventor has demonstrated a clear inventive contribution to the invention covered by the patent.

6.2.1.3.2 PBRs

The HEI and/or Schedule 1 Institution shall, where a PBR has been granted, certify that the breeder(s) are a complete set of breeders and that each breeder has contributed to the plant variety covered by the PBR.

The inventor(s) and breeder(s) must undertake to use his/her/their best efforts to assist the HEI/ Schedule 1 institution to commercialise the patent/or PBR.

6.2.2 Department of Higher Education and Training Creative Outputs and Innovations "Stamina" Incentive

The detail below constitutes an excerpt from the "Policy on the evaluation of creative outputs and innovations produced by South African Public Higher Education Institutions".

6.2.2.1 The What

6.2.2.1.1 Patents

The DHET "Stamina" Incentive is applicable to a patent that has been granted in a particular jurisdiction with substantive examination. A table indicating the major jurisdictions that conduct substantive examination is presented below (<u>Table 3</u>). Should a granted right be obtained in a jurisdiction not contained in the table below, proof of substantive examination must be provided in the form of all the examination reports (also known as official actions) received and the response provided, including the correspondence indicating acceptance by the examiner in the relevant jurisdiction.

Table 3: Major jurisdictions that conduct substantive examination of patent examinations

African Regional Intellectual Property Organisation	Malaysia
contracting states	
Australia	Malta
Brazil	Monaco
Canada	New Zealand
China	Philippines
Egypt	Republic of Korea
Ethiopia	Russian Federation
European Patent Organisation contracting states	Saudi Arabia
India	Singapore
Indonesia	Sri Lanka
Israel	Sweden
Japan	Switzerland
Jordan	United States of America
Libya	Viet Nam

Only one member of a patent family will be considered for the purposes of the subsidy. In other words, the first patent application of a patent family granted in a particular substantive examination jurisdiction will qualify. For example, if complete or national phase applications are filed in South Africa, Japan and Australia. The South African patent will not qualify when granted as there was no substantive examination conducted (however, the South African granted patent will qualify in terms of the NIPMO "Stamina" incentive, see section 6.2.1). Whichever of the Japanese or Australian applications are granted first, will be eligible for a subsidy as both jurisdictions perform substantive examination.

6.2.2.1.1 PBRs

The DHET "Stamina" Incentive is applicable to a new plant variety for which a PBR has been granted in a particular jurisdiction and subjected to examination. The International Convention for the Protection of New Varieties of Plants established the International Union for the Protection of New Varieties of Plants (UPOV) of which there are 72 parties as members and will qualify as a jurisdiction in which examination is conducted.

Table 4: Major jurisdictions that conduct examination of plant breeders' rights applications

African Regional Intellectual Property	Lithuania
Organisation	
Albania	Macedonia
Argentina	Mexico
Australia	Moldova
Austria	Morocco
Azerbaijan	Netherlands

Belgium	New Zealand
Bolivia	Nicaragua
Brazil	Norway
Bulgaria	Oman
Canada	Panama
Chile	Paraguay
China	Peru
Colombia	Poland
Costa Rica	Portugal
Czech Republic	Republic of Korea
Denmark	Romania
Dominian Republic	Russian Federation
Ecuador	Serbia
Estonia	Singapore
Finland	Slovakia
France	Slovenia
Georgia	South Africa
Germany	Spain
Guatemala	Sweden
Hungary	Switzerland
Iceland	Trinidad and Tobago
Ireland	Tunisia
Israel	Turkey
Italy	Ukraine
Japan	United Kingdom
Jordan	United States of America
Kenya	Uruguay
Kyrgyzstan	Uzbekistan
Latvia	Viet Nam

Only one member of a PBR family will be considered for the purposes of the subsidy. In other words, the first PBR application of a PBR family granted in a particular examination jurisdiction will qualify.

The DHET will determine unit allocations per granted patent and granted PBR. These units are linked to a monetary value. This monetary value is transferred to the institution in the form of a subsidy on an annual basis. This funding may be used by the institution as it deems fit.

6.2.2.2 The How

6.2.2.2.1 Patents

A copy of the granted patent including the allowed claims together with any drawings (if applicable) must be submitted to the DHET committee for final assessment. In addition, a copy of the Certificate of Issuance (such as a Letters Patent) must accompany the submission providing proof of grant.

6.2.2.2.1 PBRs

A copy of the granted PBR including the technical questionnaire and illustrations must be submitted to the DHET committee for final assessment. In addition, a copy of the Certificate of Registration must accompany the submission providing proof of grant.

6.2.2.3 The Who

An inventor(s) or breeder(s), at an HEI will be allocated an appropriate number of units, which units correspond to a financial incentive under the DHET subsidy that is paid to the institution annually.

6.2.3 The National Research Foundation "Stamina" Incentive

6.2.3.1 The What

Patents are the only form of IPR that appears to be acknowledged. When reflecting on the "Types of Research Outputs" within, for example, Basic and Applied Microbiology⁸ the following is reflected:

- (i) Primary outputs
- · Publications of original research in peer-reviewed journals
- · Review articles (subjected to peer review) in scientific journals
- · Chapters in books aimed at the research community, and that have been subjected to peer-review
- · Refereed conference proceedings (excluding abstracts)
- Scientific monographs
- (ii) Secondary outputs
- · Keynote or plenary lectures at conferences
- · Patents
- Public biological databases
- (iii) Tertiary outputs
- · Other full-length conference proceedings (excluding abstracts).

6.2.3.2 The Who

See Section 6.1.2.2.

6.2.3.3 The How

See Section 6.1.2.3.

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 $[\]frac{\text{https://www.nrf.ac.za/sites/default/files/documents/Key\%20Research\%20Areas\%20and\%20Types\%20of\%20Research\%20Outputs\%202014.pdf}{\text{https://www.nrf.ac.za/sites/default/files/documents/Key\%20Research\%20Areas\%20and\%20Types\%20of\%20Research\%20Outputs\%202014.pdf}{\text{https://www.nrf.ac.za/sites/default/files/documents/Key\%20Research\%20Areas\%20and\%20Types\%20of\%20Research\%20Outputs\%20Areas\%20Areas\%20and\%20Types\%20of\%20Research\%20Outputs\%20Areas\%20A$

6.3 "BENEFIT AND IMPACT"

Within the stage of "Benefit and Impact", incentives are in place through the IPR Act or offered by NIPMO in three (3) ways (a) Benefit Sharing for IP Creators in terms of Section 10 of the IPR Act; (b) NIPMO Innovation Category at the South African Women in Science Awards (SAWiSA); and (c) NIPMO Innovation Category for SMMEs at the National Science and Technology Forum.

- (a) The IPR Act provides for a "Benefit and Impact" incentive in the form of benefit sharing to IP Creators. In particular, section 10 of the IPR Act states "Intellectual Property creators at an institution and their heirs are granted a specific right to a portion of the revenues that accrue to the institution from their intellectual property ...until such right expires".
 - Section 6.3.1 below sets out the requirements for this incentive.
- (b) The NIPMO Innovation Category as a "Benefit and Impact" incentive at the South African Women in Science Awards provides a financial incentive to the two women whose innovation (emanating from research) has led to enhancing inclusive growth and development.
 - Section 6.3.2 below sets out the requirements for this incentive in summary format. For the full text go to https://www.dst.gov.za/index.php/media-room/latest-news/2480-call-for-nominations-2018-south-african-women-in-science-awards-2.
- (c) The NIPMO Innovation Category as a "Benefit and Impact" incentive at the National Science and Technology Forum provides a financial incentive to an SMME. Section 6.3.3 below sets out the requirements for this incentive in summary format. For the full text go to http://www.nstf.org.za/awards/

6.3.1 The IPR Act "Benefit and Impact" Incentive through benefit sharing

6.3.1.1 The What

Section 10(1) of the IPR Act mandates as follows:

"10. (1) Intellectual property creators at an institution and their heirs are granted a specific right to a portion of the revenues that accrue to the institution from their intellectual property in term of this Act until such right expires."

6.3.1.2 The Who

IP creators and their heirs are very clearly incentivised by the legislation at the point where the IP has been licensed or assigned to a third party and revenue is accruing to the institution.

6.3.1.3 The How

Section 10(2) to (5) states that:

- (2) 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.
- (3) The benefits contemplated in subsection (2) must be shared in **equal proportions** between the qualifying intellectual property creators or their heirs unless otherwise agreed between those creators and the recipient or determined in accordance with institutional policies.
- (4) The benefits to intellectual property creators and their heirs contemplated in subsection (2)(a) must be a **first call** on the applicable revenue ahead of any institutional distribution.
- (5) The recipient may distribute the balance of the revenues generated by intellectual property as it deems fit, but must apportion part of it for funding, among other things-
 - (a) more research and development;
 - (b) the operations of the office of technology transfer; and
 - (c) statutory protection of intellectual property."

These provisions are typically provided for in an institutional IP Policy and may find specific mention in the relevant contractual arrangement.

6.3.2 SAWiSA - South African Women in Science Awards "Benefit and Impact" Incentive

6.3.2.1 The What

SAWiSA is an initiative of the Department of Science and Technology which seeks to recognise and reward excellence demonstrated by South African women scientists and researchers, and profile them as role models for younger women. Each year there is a theme according to which scientists or researchers whose projects are in line with the theme are judged and awarded. The NIPMO has partnered with SAWiSA programme to introduce Innovation as a special category to recognise women who takes R&D a step closer to the market place by identifying potential IP and seeking to commercialising such. The award is a financial incentive (R80 000 (eighty thousand) per award) and there are no specific rules for how the financial award should be spent.

6.3.2.2 The Who

These awards will be made to two women whose innovation (emanating from research) has led to enhancing inclusive growth and development. Awards will be made to a "Distinguished researcher" and a "Distinguished young researcher".

In the context of being a Distinguished and a Distinguished young researcher, nominees will be judged on their research publication record, innovation outputs (use of the research results to develop or improve products, processes and services), and the inclusive growth and development impact of innovations.

6.3.2.3 The How

For the category of Distinguished Researcher, nominations should be for an established woman scientist or researcher with at least five years of postdoctoral experience, whose innovation (emanating from research) has led to a demonstrable contribution in enhancing inclusive growth and development.

For the category of Distinguished Young Researcher nominations should be for an emerging woman scientist or researcher, under the age of 40 or turning 41 during the year of the awards, who has a doctoral degree; and whose innovation (emanating from research) has led to demonstrable contribution in enhancing inclusive growth and development.

To apply or to be considered for the awards, go to https://www.dst.gov.za/index.php/media-room/latest-news/2480-call-for-nominations-2018-south-african-women-in-science-awards-2 for a list of all the application requirements.

All submitted applications are adjudicated by an expert panel whose members have expertise in various science fields and industry.

6.3.3 National Science and Technology Forum Awards "Benefit and Impact" Incentive for SMMEs

6.3.3.1 The What

The National Science and Technology Forum (NSTF) is a consultative forum for influencing the formulation and delivery of science, engineering, technology and innovation policies in South Africa. The NSTF offers annual awards to various individuals and companies who have demonstrated their contribution in the science, engineering, technology and innovation space.

In 2017/18 the existing Corporate/ SMME category was revitalised to have an increased focus on innovation from R&D and reduce the focus on academic research. The "Rewards for Innovation and their research and/or development" recognise individuals or teams at Corporates and SMMEs who have made strides in using innovation to contribute towards improving socio-benefits for the people of South Africa.

The incentive is a financial award (R55 000; fifty-five thousand) for the individual or team at Corporate organisations and SMMEs. The Department of Trade and Industry sponsors the Corporate Award and DST/NIPMO sponsors the SMME Award.

These awards are made where it can be demonstrated that:

 Research and/or development that has led to new science which in turn has led to new engineering or medical or social concepts i.e. technology; or that • Engineering or medical or social concepts (ie technology which has been developed in South Africa and has been applied) that have led to a successful innovation. This can be either an accepted innovation in science, a project, a product, a range of products, a methodology or any other form of applied output.

The impact, value to the consumer, and importance to South Africa of the innovation will also be examined.

6.3.3.2 The Who

Awards are made to teams or individuals from:

Corporate organisations: This includes large companies, science councils, HEIs, etc, unless the unit where the R&D has been carried out fits into the SMME category; and **Small, medium and micro enterprises (SMMEs)**: The award is for an SMME operating as a business for profit, defined as having an annual turnover of less than R100 million over the last 3 years. A company that is wholly owned by a corporate, or is a corporate-controlled company does not qualify under the SMME category.

6.3.3.3 The How

Nominations are registered online by the first deadline (usually in December). Full nomination documents have to be submitted by the second deadline (usually in March).

An adjudication panel of independent judges is assembled annually. It represents all sectors of the NSTF membership and, in the case of the sponsored categories, representatives of some of the sponsors. The adjudication panel reviews the nominations, identifies those that are eligible, shortlists the finalists and makes the final selection of winners. A panel of experts is also appointed by the NSTF Executive Committee. These experts assist the adjudication panel by reviewing and providing validation of the selections.

Visit http://www.nstf.org.za/awards/ for more details.

[END]