



NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
INSTITUTIONAL OFFICE

®

Policy on the Management of Intellectual Property at the NWU

Reference number	1P/1.1.10
Accountable executive manager	Deputy Vice-Chancellor: Research Innovation and Technology
Policy owner	Intellectual property and contracting manager
Responsible division	Technology Transfer and Innovation Support
Status	Approved
Approved by	Council
Date of approval	First approved on 10 June 2011 Re-approved on 15 June 2012
Amendments	Made after NIPMO approval
Date of amendments	May 2012. Technical editing done in February 2014.
Review date	2015
Rules and guidelines in terms of this policy	Yes – form part of policy
Web address of this policy	http://www.nwu.ac.za/content/policy_rules
Address on the policy data base	RMA SHARE NWU HOME/USER HOMES 2. management\2.1.3 policy development and review\2.1.3.2 review\policy documents\1P/1.1.10- IP_e.docm



Policy on the Management of Intellectual Property at the NWU

1 Preamble

As a pre-eminent university in Africa, driven by the pursuit of knowledge and innovation, with a unique institutional culture based upon the values the University espouses, the North-West University has adopted this Policy on the Management of Intellectual Property at the NWU on 15 June 2012.

2 Policy statement

It is the policy of the North-West University to deal with the ownership, distribution and commercial exploitation of intellectual property developed by staff, students and other parties concerned at North-West University (hereafter referred to as “the University”). The University takes cognisance of the Intellectual Property Rights for Publicly Funded Research and Development Act, 51 of 2008 in so far as its stipulations are applicable to the University as well as all other relevant legislation and states the intention to comply with same to the extent that it is reasonably required in law. The policy is applicable to all campuses of the University, to all temporary and permanent employees on the staff establishment of the University, to contract workers of the University, and to all registered students of the University.

3 Context

The NWU's Institutional Plan¹ provides strategic guidelines for the implementation of expertise.

Together with national stakeholders, notably government, business and labour, as well as the post-school education sector, universities have to provide much needed education and training, at the same time being catalysts for the creation of jobs, to drive development and to alleviate poverty and to support South Africa in the global knowledge economy.

To enable the University to fulfil these undertakings, for the optimal protection and to the mutual benefit of all parties, these attached rules and guidelines attempt to consolidate existing policy and stipulates the way in which intellectual property that originates in the University environment shall be dealt with, and specifically:

1. deals with ownership of intellectual property and the exploitation thereof in Parts 2, 3 and 4 of this document;
2. sets out in Part 5 the way in which the University endeavours to ensure that inventors and authors who are staff and students of the University obtain a fair share of the net income derived from the commercialization of such intellectual property; and
3. addresses the issue of accommodating indigenous knowledge as part of intellectual property in Part 6.

4 Definitions

An extensive glossary is attached at the end of the rules and guidelines.

5 Rules and guidelines

See the attached document entitled: “Rules and Guidelines for the Management of Intellectual Property at the North-West University, 2010”.

6 Procedures

Procedures are to be developed casuistically and attached on a regular basis but at least once a year.

¹ North-West University : Institutional Plan 2011 – 2013



NORTH-WEST UNIVERSITY[®]
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
INSTITUTIONAL OFFICE

Rules and Guidelines for management of Intellectual Property at the NWU

2010

Table of Contents

Rules and Guidelines for Management of Intellectual Property at the NWU

Acknowledgements	1
Executive summary	2
1 Part 1: NWU guidelines on the management of intellectual property	8
1.1 Introduction	8
1.2 General policy statement	8
1.3 Context.....	8
1.4 Inventions	10
1.5 Commercialisation.....	11
1.6 Contract research	11
1.7 Biodiversity	11
1.8 Short courses.....	11
1.9 Disputes	12
2 Part 2: Ownership of intellectual property	12
2.1 Staff	12
2.1.1 General	12
2.1.2 Specific provisions in respect of copyright.....	12
2.1.3 Specific provisions in respect of inventions, expertise and trade secrets	13
2.1.4 Staff who conduct contract research at or for outside organizations.....	14
2.1.5 Consultation work undertaken by staff.....	14
2.1.6 Intellectual property that vests in staff	15
2.1.7 Contract workers.....	15
2.1.8 Joint staff establishment	15
2.1.9 Software	16
2.2 Students	16
2.2.1 General	16
2.2.2 Specific provisions in respect of copyright.....	16
2.2.3 Outside organizations that provide bursaries	16
2.2.4 Intellectual property that vests in students.....	16
2.2.5 Commercial exploitation of intellectual property that vests in students	17
2.3 Visiting lecturers and researchers (including post-doctoral researchers)	17
2.4 Outside organisations, funders and the government	17
2.5 Incremental contributions to intellectual property	19
2.6 Trademarks of the University	19
3 Part 3: Protection of intellectual property through licensing	20
3.1 Registerable inventions (including patents, designs and plant breeders' rights).....	20
3.2 Identification of intellectual property.....	20

3.3	TTIS office services in IP.....	20
3.4	Disclosure of intellectual property.....	21
3.5	Right to publish.....	22
3.6	Registration of patents, designs and plant breeders' rights.....	22
3.7	The intellectual property advisory panel.....	23
3.8	Software.....	23
4	Part 4: Exploitation of knowledge base	24
4.1	Implementation of Expertise through spin-off companies.....	24
4.2	Agreements	25
4.2.1	Consortium, Collaboration and Research.....	26
4.2.2	Confidentiality Agreements (Non-Disclosure Agreements – NDA's).....	26
4.2.3	Material Transfer Agreements	26
4.2.4	Consulting Agreements.....	26
4.2.5	Contracts involving Traditional Knowledge and Indigenous Knowledge Systems	26
4.2.6	Licensing agreements.....	27
4.2.7	Shareholders agreements.....	27
4.3	Conflict of interest	27
4.3.1	The following principles underlie the policy:	27
4.3.2	Conflict of interest policy:	27
5	Part 5: Division of funds from the commercialisation of intellectual property.....	27
6	Part 6: Indigenous knowledge systems	29
6.1	Introduction	29
7	Part 7: Annexures	30
7.1	ANNEXURE A: Glossary.....	30
7.2	ANNEXURE B: Bibliography	38

Rules and Guidelines for Management of Intellectual Property at the NWU

Acknowledgements

We would like to express our appreciation for the initiative and guidance received from the Executive Director: Research and Innovation for the commissioning of this work.

Our gratitude extends in particular to the Director: Innovation for his major part in shaping and proof reading this document for consistency and clarity.

We thank every contributor for their valuable input and the time spent on giving it.

In particular we want to acknowledge the Stellenbosch University who gave their kind permission for us to use the format of their policy and to use large parts of it unchanged.

We also acknowledge the contribution of the MRC in allowing us to use certain parts of their policy document especially in extending our glossary.

We are appreciative of all the sources we were able to peruse.

Executive summary

PART 1: NWU GUIDELINES ON THE MANAGEMENT OF INTELLECTUAL PROPERTY

This document deals with the ownership, distribution and commercial exploitation of intellectual property developed by staff, students and other parties concerned at North-West University

The University takes cognisance of the Intellectual Property Rights for Publicly Funded Research and Development Act, 51 of 2008 in so far as its stipulations are applicable to the University as well as all other relevant legislation and states the intention to comply with same to the extent that it is reasonably required in law.

Together with national stakeholders, notably government, business and labour, as well as the post-school education sector, universities have to provide much needed education and training, at the same time being catalysts for the creation of jobs, to drive development and to alleviate poverty and to support South Africa in the global knowledge economy

Universities have to be key role players, strategic differentiators in the preparation and support of a country to find its rightful place in the global knowledge economy.

The NWU mission is to become a balanced teaching-learning and research university and implement our expertise in an innovative way. Mission element 4 endeavours to expand the implementation of expertise, both commercially and community-directed. These guidelines attempt to consolidate existing policy and stipulate the way in which intellectual property that originates in the University environment shall be dealt with.

The University undertakes to establish procedures, in accordance with Part 3 of these guidelines, regarding inventions made by staff or students of the University.

The University undertakes to establish procedures, in accordance with Part 4 of these guidelines, regarding concepts, plans and ideas with business potential that may be brought to the attention of the University by staff members or students.

The University undertakes, in the case of research and development undertaken in collaboration with other organisations, to establish procedures aimed at ensuring that the interests of the University and its staff and students in respect of intellectual property are fully protected when contracts are concluded with such other organizations.

The University undertakes to have regard for the protection of South Africa's indigenous biodiversity in accordance with the Biodiversity Act, 2004, during negotiations where biodiversity pertains to the University's intellectual property.

The University lays claim to the copyright of the course material of short courses.

Any dispute regarding the interpretation or application of these guidelines shall be dealt with in accordance with the University's procedures usually in force.

PART 2: OWNERSHIP OF INTELLECTUAL PROPERTY

There are various categories of individuals directly or indirectly involved with the University that may have an interest in the ownership of intellectual property.

Ownership of intellectual property created by staff in the normal course and scope of their duties, vests by law in the University.

The ownership of all copyrights of employees of the University in respect of works created by them in the normal course and scope of their duties or on the specific instruction of the University, vests in the University in terms of Section 21(1)(d) of the Copyright Act.

The University, through its Technology Transfer and Innovation Support (TTIS) office, may decide in certain cases to assign ownership of the whole or a part of the copyright to the staff member, or may authorize him or her to utilize the work commercially or otherwise.

The University does not lay claim to ownership or any rights (including moral rights) and income pertaining to four categories of copyrights, i.e artistic works (e.g. paintings), literary works (e.g. volumes of poetry), textbooks and musical works (compositions), even if the work in question should fall within the scope of a staff member's duties.

All rights, interest and title in any invention, trade secret and knowledge, whether patentable or register able as a model or plant breeders' right or not, created by an employee of the University in the normal course and scope of his/her employment at the University, vest by law in the University and in so far as these do not vest by law, that employee assigns such rights and interests to the University.

All inventions, expertise and trade secrets developed by a staff member (including after hours work on the area of expertise of the university) shall be deemed to have been developed in the normal course and scope of his/her employment at the University and within the domain of expertise of the University, unless the staff member can prove the contrary on the basis of an agreement or suchlike evidential material.

Contract research shall be deemed to fall within the normal course and scope of the staff member's employment and the intellectual property that may be created as a result of such contract research shall vest in the University.

The product of consultation work, whether a report, an opinion, or any other form of product or service, may be delivered by a staff member of the University to an outside organization inclusive of the copyright on the product, provided the line head of the staff member approved such activity and the necessary arrangement regarding the associated cost of such product or service is paid to the university within the university policies.

The relationship between the University and contract workers or post doctoral appointments shall be governed by a prior written contract that shall provide for, amongst others, the following:

- assignment of intellectual property rights;
- indemnity; and
- moral rights waiver in the case of copyright.

In the absence of appropriate agreements regarding intellectual property rights being agreed between the parties, the default arrangement is that all such IP shall vest in the university.

Software developed by employees, contract workers and students is subject to these guidelines and the provisions of paragraphs 2.1.2, 2.1.7 and 2.2.2 apply equally to Software. Documents supporting the development and operation of developed software packages shall be retained by developers and surrendered to the University upon request. New software development and progress therewith shall be disclosed to the University, as is the case for all other intellectual property.

The University will not lay claim to ownership of open-source software. However, employees, contract workers and students are required to disclose to the TTIS OFFICE their intention to create or to participate in the creation of open-source software.

Although students are not normally staff members of the University, they make use of the University's infrastructure, do their work at the University in the course of their studies in order to obtain a University qualification, and their work is supported and guided by staff members of the University. Students are required to assign to the University any intellectual property that may vest in them by virtue of the performance of their study obligations. Such assignment takes place during the registration process.

Outside organizations that provide bursaries to students must agree contractually in advance with the University about the ownership of intellectual property that may arise from the student's studies at the University.

In the event that a student intends to submit an assignment or dissertation (for a Master's degree) or a thesis (for a doctorate) that corresponds essentially to a commission of his or her employer, such student must disclose his/her intention to the University and his/her employer on registration or as soon as possible after he/she has become aware of the employer's commission. The University and the student's employer shall then negotiate copyright ownership and confidentiality related to the student's assignment/dissertation/thesis.

The University only claims intellectual property of visiting lecturers or researchers that was created or started during their visit to the University. Any other division of such intellectual property rights must be agreed beforehand in writing with the University. The vesting of intellectual property rights is determined by law, the intellectual contribution made in the creation of the intellectual property and by the financial contribution that made it possible.

Where a staff member or student of the University is commissioned by an outside organization to conduct a study in which existing intellectual property, which belongs to such outside organization, has to be further developed or where a problem relating to it has to be solved, the University's rights shall be limited to the incrementally added intellectual value of the investigation or research and any patents, designs and copyrights that may originate on account of such research.

The University is the owner of various registered and unregistered trade marks and therefore reserves all its rights in respect of any marks that include its name, coat of arms, abbreviation or similar indications, or that otherwise suggest an association with the University. The use of such trade marks by staff or students in the course of their duties or studies must comply with the applicable regulations (e.g. in respect of letterheads) as laid down by the University.

PART 3: PROTECTION OF INTELLECTUAL PROPERTY THROUGH LICENSING

A register able invention is any product, process, method, appliance or composition, or an improvement on an existing product, process, method or appliance, that can reasonably be deemed to be new (novel) and inventive (involves an inventive step), and that can be applied in industry, agriculture or trade.

In the case of a patent and a plant breeder's right, the inventor is obliged to ensure at all times that the invention is kept confidential, as publication or public use can destroy the possibilities for a patent, model registration or protection for a plant breeders' right – the novelty requirement is vitiated if this happens.

All discoveries must be reported to the TTIS OFFICE within 90 days of discovery and the TTIS OFFICE must report all disclosures biannually to NIPMO. The University has a legal obligation to exploit discoveries through the TTIS OFFICE and in partnership with the inventor(s) to the benefit of the University, its students and staff.

The TTIS OFFICE offers a range of services in respect of the utilization of inventions, plant varieties, designs, business concepts and other intellectual property developed by staff and students. The staff members and/or students concerned are expected and encouraged to be involved in the commercialization process.

Should the University decide at its sole discretion not to own the relevant intellectual property, then the process as described in the IPR Bill must be complied with. If the NIPMO refuses to exploit the IP itself, the relevant student or staff member is at liberty to continue with the exploitation himself or herself. The TTIS OFFICE may decide to assist such person with this at a market-related rate.

In terms of the new legislation, disclosures must be made within 90 days and the University is obliged to report the disclosures to the NIPMO. The TTIS OFFICE is responsible to perform this duty on behalf of staff. It is expected of staff to cooperate with the TTIS Office in order to comply with the stipulations of the relevant act. It is expected of staff to make disclosures to the TTIS Office within 30 days of discovery.

In cases involving research material with commercial potential, appropriate action should be taken to evaluate and protect the information before publication. Advice should be sought through the TTIS OFFICE to avoid premature disclosure which will prevent any patent protection being sought. The TTIS OFFICE uses an internationally-accepted patenting strategy that involves balancing the investment in protecting Intellectual Property with the potential market for the product. This requires careful consideration of the commercial potential of IP before investing in patenting costs and ensures that the NWU does not end up with a large portfolio of patents without potential licensees. The TTIS OFFICE strategy is therefore to file inexpensive provisional patents and, wherever possible, to desist from expensive filings except where a potential licensee has expressed interest in securing a license.

Disputes are referred to the IP Advisory Panel. The Deputy Vice-Chancellor: Research, Innovation and Technology appoints an advisory panel to:

- provide additional inputs and advice on IP related matters,
- establish a broader university-wide participation and co-determination of innovation issues,
- advise on the procedure to be followed to settle any disputes that might arise in the application of this policy, and other IP related decisions.

- Intermittently, for purposes of policy revision, make strategic recommendations regarding the management and exploitation of NWU IP to the university;

Short term relatively low-cost commitments such as provisional patent applications in the absence of disputes are not referred to the Intellectual Property Advisory Panel. Any disputes are referred to the relevant Executive Director for final resolution.

Employees and contract workers are prohibited from using, distributing, reproducing, removing or otherwise taking a copy with them on the expiry or termination of their contract or employment at the University, any software developed by them in the normal course and scope of their duties at the University, including all accompanying development material, whether written, electronic or in any other format, unless such use has been explicitly authorized by the University.

Staff members and students must disclose new software that they are developing to the TTIS OFFICE at the flowchart stage, since it is important to identify timely all the possible intellectual property rights that may emanate from such software, in order to protect these rights effectively.

PART 4: EXPLOITATION OF KNOWLEDGE BASE

In July 2008 a policy with regard to the implementation of expertise and commercialisation at the NWU was adopted.

The University may decide, after consultation with the inventor or entrepreneur and/or line manager, to exploit intellectual property by means of assignment, licensing, strategic partnerships, the establishment of spin-off enterprises or any other appropriate means at its sole discretion.

The TTIS OFFICE primarily performs an incubation role within the University and will not necessarily invest in an enterprise, although the possibility cannot be excluded. Investments shall be made strictly on a business basis by Institutional Management, taking into account a business plan and all other relevant information.

The NWU is a legal entity and the authority to sign agreements on its behalf is restricted and governed by a policy annexure: Authorisation levels (Signing authority) dated 16 March 2007.

It is the responsibility of members of the NWU to be aware of IP clauses of research, collaboration and consortium contracts, and to ensure that the terms of such agreements with third parties do not conflict with the terms in these guidelines.

It is the responsibility of members of the NWU to ensure that a signed NDA is in place should it be necessary to discuss proprietary creations or discoveries with third parties.

It is the responsibility of IP Creators to inform the research director or equivalent, of any proposed transfer of NWU material to either commercial or non-commercial concerns.

Employees of the NWU are not allowed to enter into agreements related to outside employment, such as consulting agreements, without affirmative notice to the prospective employer that the Intellectual Property Rights of the NWU cannot be subordinated to a third party consulting or employment agreement.

All contracts relating to the research, use and application of traditional knowledge and traditional technologies must be reviewed and approved in consultation with the NWU Ethics Committee.

Licensing agreements are used to bestow either exclusive or non-exclusive rights on the contracting parties to research and or commercialize a discovery. Only authorized individuals may sign on behalf of the University once the TTIS Office has ensured that the contracting procedures have been complied with.

Whenever the University is to hold equity in a spin-off company or any other enterprise, the University's interests must be protected with a duly negotiated and agreed shareholders agreement in writing.

Employees should not be in a position to influence the commercial decisions of the NWU or its associated or subsidiary companies in such a way that it may lead to reduced income for the Institution or its companies.

PART 5: DIVISION OF FUNDS FROM THE COMMERCIALISATION OF INTELLECTUAL PROPERTY

The TTIS OFFICE shall keep a record for each intellectual property contractual agreement that generates royalty or dividend income. Earnings derived from the commercialization of intellectual property shall be divided in accordance with the new criteria as required by law.

PART 6: INDIGENOUS KNOWLEDGE SYSTEMS

The University has an IKS Centre of Excellence at its Mafikeng campus and through the work of this Centre the University wants to align its efforts with the National Policy on Indigenous Knowledge, 2004.

In order for Indigenous Knowledge to contribute to the conversion of knowledge into wealth and eradicate poverty it must be protected through an inclusive IPR policy and legal framework which takes into account IKS imperatives.

Institutions of learning and research involved in the promotion of IKS such as the North-West University should ensure that their IPR policies are consistent with international and regional policies, legal frameworks, practices and debates including those of WIPO, WTO, ARIPO and ORAPI to PIPER.

PART 7: ANNEXURES

A comprehensive glossary and a bibliography is attached as annexures "A" and "B".

1 Part 1: NWU guidelines on the management of intellectual property

1.1 Introduction

This document deals with the ownership, distribution and commercial exploitation of intellectual property developed by staff, students and other parties concerned at North-West University (hereafter referred to as “the University”). The guidelines contained in this document are applicable to all campuses of the University, to all temporary and permanent employees on the staff establishment of the University, to contract workers of the University, and to all registered students of the University. Employees and contract workers of the University are referred to collectively as the “staff” of the University in this document.

1.2 General policy statement

The University takes cognisance of the Intellectual Property Rights for Publicly Funded Research and Development Act, 51 of 2008 in so far as its stipulations are applicable to the University as well as all other relevant legislation and states the intention to comply with same to the extent that it is reasonably required in law.

1.3 Context

The NWU’s Institutional Plan² provides strategic guidelines for the implementation of expertise: Universities are national assets and have a calling to study and explore knowledge and the revelation contained in creation and Scripture, and to serve the country and its people. The country’s prioritized national development goals include addressing the plight of the millions of South Africans who are poverty stricken and have little or no access to basic services, jobs, skills development, housing and education.

Together with national stakeholders, notably government, business and labour, as well as the post-school education sector, universities have to provide much needed education and training, at the same time being catalysts for the creation of jobs, to drive development and to alleviate poverty and to support South Africa in the global knowledge economy.

Universities should do this principally through delivering highly-skilled graduates, delivering relevant research and implementing their expertise in industry as well as in communities. The NWU will:

- Develop, educate and empower through quality teaching and learning, well-rounded graduates who are able to think laterally and critically in their service to the country and its people;
- Develop and sustain high-quality, relevant and focused research, supplying innovative solutions to challenges faced by the scholarly community, the country, the continent and the world; and
- Expand the implementation of expertise, both commercially and community-directed, for the benefit of the province, the country, the SADC region, the continent and ultimately the world.

It is thus evident that the modern university cannot simply operate within its traditional boundaries and explore knowledge for its own sake: it is a requirement of the modern university to be relevant, to impact positively on its environment by virtue of economic and social development, to be a catalyst for dynamic societal development. Universities have to be key role players, strategic differentiators in the preparation and support of a country to find its rightful place in the global knowledge economy.

² North-West University : Institutional Plan 2011 – 2013

Vision

The NWU's vision is to be a pre-eminent University in Africa, driven by the pursuit of knowledge and innovation.

Mission

The NWU's mission is to become a balanced teaching-learning and research university and implement our expertise in an innovative way. This the institution will achieve as it lives its values, strives for sound management and pursues transformation, while being locally engaged, nationally relevant and internationally recognized.

Mission element 4 endeavours to expand the implementation of expertise, both commercially and community-directed, for the benefit of the province, the country, the SADC region, the continent and ultimately the world.

This ideal is contained in the following goals:

- Pursue relevant and dynamic implementation of expertise and
- commercialization of research results.
- Agree to and implement the framework for the implementation of expertise, focusing on:
 - Commercialization of expertise (in accordance with the policy).
 - Community engagement projects.
 - Projects or engagements that can be deemed to be aimed at
 - development in the broadest sense of the word.
 - Projects where staff provide expertise to national and statutory bodies
 - (not for remuneration).
- Foster a spirit of entrepreneurialism among academics by:
 - Communicating the importance of third stream income generation for the NWU;
 - Communicating the importance of reputation enhancement based on implementation of expertise; and
 - Emphasizing the material benefits to academics when embarking on implementation of expertise within the parameters of the policy.
 - Offering a basic training course on how to use the project budget model.

Values

The North-West University subscribes to the core values, these being human dignity, equality and freedom, integrity, tolerance, respect, commitment to excellence, scholarly engagement, academic freedom and justice.

The University commits itself:-

- to ensure that its primary obligation in the execution of research is the search for knowledge, where appropriate, for the benefit of the community and for utilisation by the community;
- support and encourage research and development by staff and students with or without an explicit profit-seeking motive;

- stimulate and support, in partnership with its staff and by means of the necessary recognition and encouragement, research and development which may lead to inventions, products or business ideas that can be exploited commercially;
- undertake such research and development, where necessary and useful, in collaboration with other organisations on a basis that is to the benefit of all participating parties;
- unlock the value of the knowledge base (intellectual property and expertise that vest in persons) of the University to the benefit of both the inventors and/or entrepreneurs and the University by means of effective support in a spirit of partnership;
- protect by means of registration, in partnership with its staff, inventions with commercial potential that emanate from research and development at the University and to ensure that the process of registration is managed in the most effective way;
- further exploit, and to assist in the exploitation and marketing of, registered inventions that have good prospects of being commercially viable; and
- investigate, in partnership with its staff, business ideas that emanate from research and development at the University and to ensure that the process of incubation is managed in the most effective way, and to assist in the exploitation and marketing thereof.

To enable the University to fulfil these undertakings, for the optimal protection and to the mutual benefit of all parties, these guidelines attempt to consolidate existing policy and stipulates the way in which intellectual property that originates in the University environment shall be dealt with, and specifically:

- (i) deals with ownership of intellectual property and the exploitation thereof in Parts 2, 3 and 4 of this document;
- (ii) sets out in Part 5 the way in which the University endeavours to ensure that inventors and authors who are staff and students of the University obtain a fair share of the net income derived from the commercialization of such intellectual property; and
- (iii) addresses the issue of accommodating indigenous knowledge as part of intellectual property in Part 6.

1.4 Inventions

The University undertakes to establish procedures, in accordance with Part 3 of these guidelines, regarding inventions made by staff or students of the University, which would help to ensure that:

- (a) it can be factually established in whom the intellectual property rights concerning such inventions should be vested and, if applicable, in whose name any inventions should therefore be registered;
- (b) due care is taken that the necessary assistance and advice be given to inventors in order to ensure that the rights of all the relevant parties in respect of their inventions are protected at the time of disclosure of the results of their research and development work;
- (c) due care is taken that during the process of registering an invention, the academic aim to publish is given thorough consideration;
- (d) in each case a fair division of royalties and any other income from the invention is made between the University and the inventor, taking into account costs incurred by the relevant parties in connection with the discovery or development of the invention and the practical application and refinement thereof, and, if applicable, during the registration process of such invention; and
- (e) the viability and business potential of such inventions can be properly evaluated.

1.5 Commercialisation

The University undertakes to establish procedures, in accordance with Part 4 of these guidelines, regarding concepts, plans and ideas with business potential that may be brought to the attention of the University by staff members or students, which would help to ensure that:

- (a) the viability and commercial potential of an enterprise based on such ideas can be properly evaluated;
- (b) due care is taken to keep the contents of such concepts, plans and/or ideas confidential in so far as this is necessary;
- (c) due care is taken that the entrepreneur is given support, which, among other things, may take the form of training, assistance, advice, mentoring and incubation space, in order to ensure that the expertise and space exist to develop the enterprise successfully; and
- (d) in each case a fair division of equity, royalties and/or other income from the enterprise is made between the University and the entrepreneur, taking into account any costs incurred by the relevant parties in respect of the establishment of the enterprise, including a loan account.

1.6 Contract research

The University undertakes, in the case of research and development undertaken in collaboration with other organisations, to establish procedures aimed at ensuring:

- (a) that the interests of the University and its staff and students in respect of intellectual property are fully protected when contracts are concluded with such other organizations; and
- (b) that, in consideration of the above, a written agreement is formulated prior to the conclusion of contracts with such other organizations concerning:
 - the rights and obligations of all the parties involved in respect of intellectual property that may emanate from the research and development;
 - the utilization of such intellectual property, including the granting of licenses and commercialization rights; and
 - claims to and payment of royalties, as well as any other income derived from such intellectual property.

1.7 Biodiversity

The University undertakes to have regard for the protection of South Africa's indigenous biodiversity in accordance with the Biodiversity Act, 2004, during negotiations where biodiversity pertains to the University's intellectual property.

1.8 Short courses

One form of commercialization of the University's knowledge base is through the presentation of courses to clients for gain. The precise definition of "short courses" and the relevant procedures will be set out in the Policy on Short Courses. In terms of this Policy, however, the University lays claim to the copyright of the course material of short courses. The use of the University's trade mark in the presentation of short courses will also be dealt with in the Policy on Short Courses³.

³ *Short Courses Policy* 31 August 2005 p1-4.

1.9 Disputes

Any dispute regarding the interpretation or application of these guidelines shall be dealt with in accordance with the University's procedures usually in force.

2 Part 2: Ownership of intellectual property

Usually, ownership of intellectual property gives the owner:

- exclusive rights to use the property (such as the right to use the invention covered by the grant of patent for the period of the patent, or the right to publish, copy, adapt, and perform copyright material or to use a particular trade mark or design);
- the right to sell or transfer, grant licenses or permissions to use, donate, or use it as security for loans;
- entitlement to registration (where applicable);
- standing to seek protection of the exclusive rights in the property before a court of law (e.g. by injunction restraining infringing conduct or by an award of damages);
- the ability to control exclusively and directly development and exploitation of the property; and
- liabilities of the kind that are usually associated with the ownership of any property, including liability to taxation or legal actions in negligence, contractual obligations to indemnify or protect other parties, registration and maintenance costs, and other imposts.⁴

There are various categories of individuals directly or indirectly involved with the University that may have an interest in the ownership of intellectual property.

2.1 Staff

2.1.1 General

Ownership of intellectual property created by staff in the normal course and scope of their duties vests by law⁵ in the University. The ownership of intellectual property created by contract workers, including post doctoral appointments, in the execution of their contractual obligations at the University also vests in the University.

2.1.2 Specific provisions in respect of copyright

2.1.2.1 Employees and contract workers

The ownership of all copyrights of employees of the University in respect of works created by them in the normal course and scope of their duties or on the specific instruction of the University, vests in the University in terms of Section 21(1)(d) of the Copyright Act⁶. Contract workers assign to the University their copyright in all works that may originate during the execution of their contractual obligations.

In the case of software care must be taken that the contractor or post doctoral appointee assigns copyright to the University contractually.

Exceptions are to be explained in paragraphs 2.1.2.4 and 2.1.2.5 *below*.

⁴ Australian Vice Chancellors-Committee, *Ownership of Intellectual Property in Universities, Policy and Good Practice Guide*, 2002 p10.

⁵ *Intellectual Property Rights from Publicly Financed Research and Development Act*, 51 of 2008, section 4(1).

⁶ *Copyright Act*, 98 OF 1978.

2.1.2.2 Identification of copyright works

All copyright works, as fully defined in the Copyright Act, to which the University lays claim must be identified as follows:

“Copyright © year North-West University

All rights reserved”

The year included in the declaration is the year in which copies of the work are made available to students or members of the public, or the work is otherwise published, for the first time.

2.1.2.3 Course material

All works created by staff of the University in the normal course and scope of their duties, including their tuition, research and community-interaction functions, shall, unless otherwise agreed, be deemed to be works originating within the scope of the staff members’ employment obligations. These include works that are created in the performance of a staff member’s normal duties, or in the execution of specific tuition, research or community-interaction projects assigned to the staff member.

A former staff member shall not be prevented by the University from using tuition material created by him/her for normal tuition purposes at other institutions, provided that permission to use the material is obtained in writing from the University

2.1.2.4 Waiver of copyright and royalties

The University, through its Technology Transfer and Innovation Support (TTIS) office, may upon written request in certain cases decide to assign ownership of the whole or a part of the copyright to the staff member, or may authorize him or her to utilize the work commercially or otherwise.

2.1.2.5 Artistic works (e.g. paintings), literary works (e.g. volumes of poetry), textbooks and musical works (compositions)

Notwithstanding the contents of this paragraph, the University does not lay claim to ownership or any rights (including moral rights)⁷ and income pertaining to these four categories of copyrights, even if the work in question should fall within the scope of a staff member’s duties.

Course material, as defined here above and which finds its way as a derivative into works of a scholarly or aesthetic nature (text books) or popular books may be prescribed to students of the staff member only by the existing academic structures of the University. The University does not lay claim to income derived from copyrights in the work in question. (For example, the University will not lay claim to the copyright of a volume of poetry by a lecturer in Literature, even if that volume is later prescribed to students.) Should any conflict of interest situation arise with regard to prescribed course work, the prescription of own material by any academic staff member has to be approved by his/her dean/director.

2.1.3 Specific provisions in respect of inventions, expertise and trade secrets

All rights, interest and title in any invention, trade secret and knowledge, whether patentable or registerable as a model or plant breeders’ right or not, created by an employee of the University in the normal course and scope of his/her employment at the University, vest by law in the University and in so far as these do not vest by law, that employee assigns such rights and interests to the University.

⁷ Australian Vice Chancellors-Committee, *Ownership of Intellectual Property in Universities, Policy and Good Practice Guide*, 2002 p8.

Contract workers and post doctoral appointees also assign to the University all their rights, title and interest in any inventions, knowledge and trade secrets that may be developed in the execution of their contractual obligations. Unless otherwise agreed, this shall include all inventions and expertise developed by the staff member in the field of specialization in which the said staff member has been appointed at the University.

The above assignments shall include all rights, title and interest in any inventions developed by the staff member during the fulfilment of his/her employment obligations. It extends also to any provisional application for registration of a patent, model or plant breeders' right that is filed after termination of the staff member's employment relationship with the University.

All inventions, expertise and trade secrets developed by a staff member (including after hours work on the area of expertise of the university) shall be deemed to have been developed in the normal course and scope of his/her employment at the University and within the domain of expertise of the University, unless the staff member can prove the contrary on the basis of an agreement or suchlike evidential material.

2.1.4 Staff who conduct contract research at or for outside organizations

Staff of the University who visit other educational institutions or other organizations with a view to discussing research ideas with them, or who conduct research elsewhere during research leave, must ensure that appropriate agreements regarding intellectual property rights are concluded prior to the visit. In a similar manner, staff members who are approached by outside organizations to conduct contract research for such bodies, regardless of the place where the contract research is done, must ensure that appropriate agreements regarding intellectual property rights are in place. In the absence of appropriate agreements regarding intellectual property rights being agreed between the parties, the default arrangement is that all such IP shall vest in the university.

The Director: TTIS, is available to assist staff in this regard. Contract research shall be deemed to fall within the normal course and scope of the staff member's employment, and the intellectual property that may be created as a result of such contract research shall vest in the University.

The University shall give reasonable consideration subject to relevant legislation to requests from the other organization regarding the intellectual property rights emanating from such research. Any assignment to, or sharing with, the outside organization of the said intellectual property rights that may emanate from such contract research, must be approved beforehand in writing and signed by the designated person from the University. Any assignment is also subject to NIPMO approval as indicated in regulation 11(9) of the regulations. The University shall take reasonable steps to protect the confidentiality of such contracts, where applicable.

2.1.5 Consultation work undertaken by staff

A distinction is made between consultation and contract research, as defined in the list of definitions in Annexure B.

The product of consultation work, whether a report, an opinion, or any other form of product or service, may be delivered by a staff member of the University to an outside organization inclusive of the copyright on the product, provided the line head of the staff member approved such activity and the necessary arrangement regarding the associated cost of such product or service is paid to the university within the university policies. These activities may not prejudice the right to academic publication. The University consequently reserves the right to take all reasonable steps to prevent such prejudice. The University also retains the copyright on

the raw data created during research for such consultation work in order to, *inter alia*, encourage further research. The University also reserves all rights to any publication resulting from such consultative work. Staff members of the University, therefore, assign to the University the copyright and any other rights that may vest in such raw data, unless otherwise agreed with the University.

The University acknowledges that certain forms of consultation work cannot be performed meaningfully without the use of the University's infrastructure (e.g. analytical laboratories), with attendant costs for the University. In such a case, the relevant staff members (individually or collectively) must conclude an agreement with NWU in consultation with the Dean concerned, including the manner in which the University is to be compensated for such use.

Other forms of private work that do not fall within the definition of consultation shall be deemed to be contract research, unless otherwise agreed beforehand, and shall be dealt with in terms of paragraph 2.1.4.

2.1.6 Intellectual property that vests in staff

If a staff member claims that ownership of intellectual property vests in him- or herself, and can reasonably prove to the University that such intellectual property has not been created in the normal course and scope of his or her employment, the University shall accept that the staff member is entitled to the ownership thereof. If any public money had been used in the development of such intellectual property, the University may lay claim to the associated pro rata portion of intellectual property and the stipulations of the Act still apply.

2.1.7 Contract workers

Personnel who are appointed on a contract basis by the University and post doctoral appointments are included under the terms staff and staff members as used above. They are subject to the same conditions regarding intellectual property rights that apply to the employees of the University, unless the contrary has been stated explicitly. Full rights, title and interest in respect of intellectual property, including inventions, designs, expertise and the copyright of all work developed in the normal course and scope of the execution of the contract with the University, are assigned to the University.

The relationship between the University and such contract workers or post doctoral appointments shall be governed by a prior written contract that shall provide for, amongst others, the following:

- assignment of intellectual property rights;
- indemnity; and
- moral rights waiver in the case of copyright.

In the absence of appropriate agreements regarding intellectual property rights being agreed between the parties, the default arrangement is that all such IP shall vest in the university.

Each contract worker must also complete a disclosure form in respect of any such intellectual property developed in the course of his or her contract work.

2.1.8 Joint staff establishment

The ownership of intellectual property of staff who are on a joint staff establishment of the University and an outside organization shall be determined in accordance with a prior written agreement between the University and that outside organization.

2.1.9 Software

In terms of the Copyright Act 98 of 1978, software is subject to copyright protection. However, in certain jurisdictions software may also be patented. The development of software by employees, contract workers and students are subject to the following provisions:

- Software developed by employees, contract workers and students is subject to these guidelines and the provisions of paragraphs 2.1.2, 2.1.7 and 2.2.2 apply equally to Software;
- documents supporting the development and operation of developed software packages shall be retained by developers and surrendered to the University upon request; and
- new software development and progress therewith shall be disclosed to the University, as is the case for all other intellectual property.

2.1.9.1 Open-source software

Notwithstanding the University's claim to ownership of software that is created by its employees, contract workers and students in their normal course and scope of their work, the University supports and promotes the creation and participation in the creation of open-source software. The University will not lay claim to ownership of open-source software. However, employees, contract workers and students are required to disclose to the TTIS OFFICE their intention to create or to participate in the creation of open-source software.

2.2 Students

2.2.1 General

Although students are not normally staff members of the University, they make use of the University's infrastructure, do their work at the University in the course of their studies in order to obtain a University qualification, and their work is supported and guided by staff members of the University. Students are required to assign to the University any intellectual property that may vest in them by virtue of the performance of their study obligations. Such assignment takes place during the registration process.

In the absence of appropriate agreements regarding intellectual property rights being agreed between the parties, the default arrangement is that all such IP shall vest in the university.

2.2.2 Specific provisions in respect of copyright

Paragraph 2.1.2 applies, *mutatis mutandis*, to students.

2.2.3 Outside organizations that provide bursaries

Outside organizations that provide bursaries to students must agree contractually in advance with the University about the ownership of intellectual property that may arise from the student's studies at the University. It is the student's responsibility to assist in establishing such an agreement. The University shall at least offer the outside organization a right of first refusal to obtain an exclusive license to utilize the intellectual property commercially, at a reasonable, agreed fee.

In the absence of appropriate agreements regarding intellectual property rights being agreed between the parties, the default arrangement is that all such IP shall vest in the University.

2.2.4 Intellectual property that vests in students

If a student claims that ownership of intellectual property vests in him- or herself, and can reasonably prove to the Director: TTIS of the University that such intellectual property has not been created in the normal course and scope of his or her studies, the University shall accept that the student is entitled to the ownership thereof.

Any disputes are referred to the Deputy Vice-Chancellor: Research, Innovation and Technology for final resolution.

2.2.5 Commercial exploitation of intellectual property that vests in students

In the event that a student intends to submit an assignment or dissertation (for a Master's degree) or a thesis (for a doctorate) that corresponds essentially to a commission of his or her employer, such student must disclose his/her intention to the University and his/her employer on registration or as soon as possible after he/she has become aware of the employer's commission. The University and the student's employer shall then negotiate copyright ownership and confidentiality related to the student's assignment/dissertation/thesis. Normally, the University will not keep the assignment/dissertation/thesis confidential for a period of longer than one year and it reserves the right to publish the assignment/dissertation/thesis in electronic format, of which the University shall be the copyright owner in terms of this Policy.

In the absence of appropriate agreements regarding intellectual property rights being agreed between the parties, the default arrangement is that all such IP shall vest in the university.

However, a student working on an invention or assisting with research of a lecturer shall not be considered as an inventor, but is only an "enabler" as defined in the glossary.

2.3 Visiting lecturers and researchers (including post-doctoral researchers)

Visiting lecturers and researchers who are not permanently employed by the University must, prior to their visit, sign a confidentiality agreement in terms of which they undertake to keep confidential all confidential information which may come to their attention during their visit to the University, and not to use it for personal gain.

They are also required to assign any intellectual property rights, resulting from their involvement in any research project of the University or as a result of their stay at the University, to the University.

The University only claims intellectual property of visiting lecturers or researchers that was created or started during their visit to the University. Any other division of such intellectual property rights must be agreed beforehand in writing with the University.

In the absence of appropriate agreements regarding intellectual property rights being agreed between the parties, the default arrangement is that all such IP shall vest in the university.

2.4 Outside organisations, funders and the government

The intellectual property rights vest, in the first instance, in the inventor, and as long as the inventor is a staff member or student of the University, the University shall be entitled in principle to ownership of the intellectual property concerned, unless otherwise agreed.

The vesting of intellectual property rights is primarily determined by law, the intellectual contribution made in the creation of the intellectual property and by the financial contribution that made it possible. Furthermore, ownership of intellectual property rights is basically determined on the following grounds:

- **By virtue of creation of the material**

The actual author, creator, maker, inventor, or composer of the subject matter usually has the initial claim to the intellectual property rights in that subject matter. However, authorship and invention are technically defined both within applicable legislation and at common law. It cannot be assumed that the person who had

the ideas is necessarily the author or inventor, or that ideas alone are protected. Furthermore, while creation of the material is a starting point in determining ownership, it is subject to claims arising under employment contracts, other agreements including assignment and registration.

- **□ By operation of agreements**

The question of ownership can be determined by agreement between the creator of the intellectual property and someone else, typically an employer, external funding body, university company, members of a research team or publisher. Staff employment conditions, university policies and any controlling legislative provisions (e.g. law on unfair contracts, the requirement that some contracts be in writing, and the fact that an assignment or transfer of statutory intellectual property rights must be in writing and signed by the assignor) determine the rights of respective parties and the framework of cooperation. Binding or enforceable agreements are concluded in writing (oral agreements are also binding but are subject to difficulty should proof be needed) and have terms implied into them from the surrounding circumstances (such as the course of dealing between the parties, their actions associated with the agreement or from trade custom and usage). In the case of visitors to universities who are collaborating on a research project, or engaged in a professional experience program, study leave or the like, the letter of invitation has to refer to the fact that the university's IP policy is to apply to any work produced by the visitor. While the legally binding nature of such a term in a letter of invitation may be open to question, it at least provides a starting point from which to proceed.

In the absence of appropriate agreements regarding intellectual property rights being agreed between the parties, the default arrangement is that all such IP shall vest in the university.

- **Employer's entitlements**

These will result from express terms and conditions in a contract of employment, by incorporation of terms and conditions from other agreements or instruments into the contract of employment, by implied terms, by operation of a duty of fidelity (for example where an employee is deemed by the law to be holding an invention on trust for the employer) or by operation of legislation (including by-laws, regulations and rules). While an employer's entitlements essentially arise out of the employment relationship, the latter is subject to a wide range of factors which come under the rubric of employment law and the employment contract is thus considered a distinct form of agreement which should be treated separately.

- **□ Registration**

Patents, designs, trade marks and plant breeder's rights require registration of ownership and interests in ownership to come within the respective legislative regimes. It will be important to determine who has the right to apply for registration, e.g. as between researchers and a university company seeking to commercialize a technology in which there are patent rights. The registered owner is the absolute legal owner and may use the certificate of registration to establish ownership. Registration may be opposed but once any opposition has been finalized or in the absence of opposition, registration provides certainty of ownership.

- **□ Special legislative provisions**

The statutes governing intellectual property contain a number of provisions which can affect ownership.⁸ The new Intellectual Property Rights for Publicly Funded Research and Development Act, 51 of 2008 is a case in point.

If the outside organization wishes to share in the commercial utilization or wants the intellectual property to be assigned to it, it is requested to approach the TTIS OFFICE in order to conclude an agreement with the University in this regard. All contracts pertaining to intellectual property, including research contracts, must be concluded in writing between the relevant outside organization and the University, and must be officially approved by the designated authorized persons according to the policies of the University.

Such an agreement must address the division of ownership and the rights to utilization of the relevant intellectual property between the University and the outside organization. The University may, at its own discretion, in respect of externally funded research work, grant the relevant outside firm the right of first refusal to obtain a license to utilize the intellectual property commercially, at a reasonable, agreed fee.

The ownership of intellectual property emanating from research done with the help of a grant or with the help of a government department or initiative shall vest in the University, unless otherwise agreed.

2.5 Incremental contributions to intellectual property

Where a staff member or student of the University is commissioned by an outside organization to conduct a study in which existing intellectual property, which belongs to such outside organization, has to be further developed or where a problem relating to it has to be solved, the University's rights shall be limited to the incrementally added intellectual value of the investigation or research and any patents, designs and copyrights that may originate on account of such research. In all such cases the relevant staff member or student concerned and the outside organization are also required to contact the TTIS OFFICE in order to have the parties' respective rights to the said intellectual property contained in a written contract with the University, including the licensing of such rights.

In the absence of appropriate agreements regarding incremental contributions to intellectual property rights being agreed between the parties, the default arrangement is that all such IP shall vest in the university.

2.6 Trademarks of the University

The University is the owner of various registered and unregistered trade marks and therefore reserves all its rights in respect of any marks that include its name, coat of arms, abbreviation or similar indications, or that otherwise suggest an association with the University. These include, *inter alia*, the names that identify the University and/or its various campuses, corporate colors and logos that have been or will be developed by Departments, Institutes, *Bureaux* or Units and the University's respective domain names.

The use of such trade marks by staff or students in the course of their duties or studies must comply with the applicable regulations (e.g. in respect of letterheads) as laid down by the University.

The use of the University's trade marks for private purposes or gain by staff, students or members of the public is strictly prohibited, unless permission is given by an IM member of the university upon the submission of a written request and motivation, for each event.

⁸ Australian Vice Chancellors-Committee, *Ownership of Intellectual Property in Universities, Policy and Good Practice Guide*, 2002 p10-12.

The University reserves the right to license its name or registered trade marks to commercial partners. This includes the licensing of the University's name to short courses in terms of the Policy on Short Courses.

3 Part 3: Protection of intellectual property through licensing

3.1 Registerable inventions (including patents, designs and plant breeders' rights)

A registerable invention is any product, process, method, appliance or composition, or an improvement on an existing product, process, method or appliance, that can reasonably be deemed to be new (novel) and inventive (involves an inventive step), and that can be applied in industry, agriculture or trade⁹.

The novelty requirement is of particular importance for patents, models and plant breeders' rights and any inventor with an idea must first test it against the current state of the art. The current state of the art includes all publications on and uses of similar products and processes, and especially in the relevant field of application. A recommendation by the Departmental Chairperson and/or Dean concerned, regarding the merits of an idea is very valuable and is therefore also required at the time of disclosure.

In the case of a patent and a plant breeder's right, the inventor is obliged to ensure at all times that the invention is kept confidential, as publication or public use can destroy the possibilities for a patent, model registration or protection for a plant breeders' right – the novelty requirement is vitiated if this happens. This includes disclosure to any member of the public without obtaining his or her agreement to keep the invention confidential. If anyone should become aware of such an untimely disclosure, the TTIS OFFICE must be contacted immediately.

Both patenting and copyright protection are applicable to certain inventions. A typical and important example is software. Such cases are governed by special provisions (see paragraph 3.5).

3.2 Identification of intellectual property

The TTIS OFFICE and all academic managers are responsible to identify, in consultation with staff and students, any intellectual property created within the University. All discoveries must be reported to the TTIS OFFICE within 90 days of discovery and the TTIS OFFICE must report all disclosures biannually to NIPMO.¹⁰ The University has a legal obligation to exploit discoveries through the TTIS OFFICE and in partnership with the inventor(s) to the benefit of the University, its students and staff. This identification is achieved through regular surveys, annual reports and disclosures made by staff and students via their academic or research head to the TTIS OFFICE.

3.3 TTIS office services in IP

The TTIS OFFICE offers the University's staff and students the following services in respect of the utilization of inventions, plant varieties, designs, business concepts and other intellectual property developed by staff and students:

- a technological investigation to establish whether the invention is original/unique *id est* a patent search;

⁹ *The Patents Act, 57 of 1978 as amended; DM Kisch Inc 2003, Patents p1.*

¹⁰ *Intellectual Property Rights from Publicly Financed Research and Development Act, 51 of 2008, section 5(1)(e) and 5(2)(b).*

- estimating its commercial potential;
- investigating the commercial and licensing possibilities;
- undertaking the preliminary patenting of an invention with the assistance of the Legal office;
- a preliminary market analysis, a business plan, investigation of exploitation routes (whether through licensing, sale of rights, or the establishment of spin-off companies);
- investigating sources of financing, the formation of partnerships and the finding of buyers; and
- protection, monitoring and ongoing support of a patent after transfer to a partner.
- distribution of proceeds emanating from the exploitation of IP in accordance with the relevant NWU policies.

In certain cases the University, in consultation with the inventor, may need to make use of third parties to provide the services. The costs attached to this shall mostly be recovered from proceeds generated by the intellectual property or business plan, unless the University has no share in the said proceeds, in which case the relevant staff member or student who is assisted by the University shall be responsible for such costs.

The staff members and/or students concerned are expected and encouraged to be involved in the commercialization process.

If a staff member or student approaches the University with a proposal for the exploitation of intellectual property that has been developed by him or her during the normal course of service at the University or otherwise discloses to the University intellectual property of which the ownership vests in the University, the University must in consultation with the inventor investigate the possibilities for the commercial exploitation thereof. Such investigation takes place in ongoing consultation with the person, after which the University shall inform the person concerned in writing whether or not it will continue with the exploitation thereof in partnership with the relevant person. A report is also submitted to NIPMO in terms of section 5 of the IPR for PFR&D Bill 2008.

Should the University decide at its sole discretion not to own the relevant intellectual property, then the process as described in the IPR Bill must be complied with¹¹. If the NIPMO refuses to exploit the IP itself, the relevant student or staff member is at liberty to continue with the exploitation himself or herself. The TTIS OFFICE may decide to assist such person with this at a market-related rate.

3.4 Disclosure of intellectual property

In order to ensure maximum utilization of new intellectual property, identification and disclosure thereof must be made to the TTIS OFFICE as soon as possible after a new and potentially useful product or process has been conceptualized, or a new plant variety has been developed, or when an unusual, unexpected or non-obvious research result, which has the potential of being commercially or otherwise applied, is obtained.

In terms of the new legislation, disclosures must be made within 90 days and the University is obliged to report the disclosures to the NIPMO. The TTIS OFFICE is responsible to perform this duty on behalf of staff. It is expected of staff to cooperate with the TTIS Office in order to comply with the stipulations of the relevant act. It is expected of staff to make disclosures to the TTIS Office within 30 days of discovery.

After disclosure, the services as set out in paragraph 3.4 are rendered.

¹¹ *Intellectual Property Rights from Publicly Financed Research and Development Act, 51 of 2008, section 4.*

All researchers must apply a proper system of laboratory management in order to claim the uniqueness and date of an invention.

3.5 Right to publish

Members of the NWU are normally expected to publish and present the results of their work in pursuit of research excellence. The NWU does not wish to restrict this freedom. However, in cases involving research material with commercial potential, appropriate action should be taken to evaluate and protect the information before publication. It should be borne in mind that some research contracts may restrict open communication. Advice should be sought through the TTIS OFFICE to avoid premature disclosure which will prevent any patent protection being sought.¹²

Since disclosure nullifies the possibilities of patenting, model registration and protection of plant breeders' rights, public disclosure of such research results (inter alia in scientific periodicals and journals) must be held back until such time as the University has made a decision together with the inventor about the possible patenting or registration of the invention. At the same time, the University shall do everything in its power to ensure that the period of non-disclosure is as short as possible.

3.6 Registration of patents, designs and plant breeders' rights

The Director: TTIS Office advises the Deputy Vice-Chancellor: Research, Innovation and Technology on IP issues such as national phase patent filings, PCT applications, licensing and formation of spin-out companies. The TTIS Office shall make such recommendation and the final approval shall be given by the relevant Executive Director within a reasonable period of time after disclosure of the invention. Disputes are referred to the IP Advisory Panel.

The TTIS OFFICE uses an internationally-accepted patenting strategy that involves balancing the investment in protecting Intellectual Property with the potential market for the product. This requires careful consideration of the commercial potential of IP before investing in patenting costs and ensures that the NWU does not end up with a large portfolio of patents without potential licensees. The TTIS OFFICE strategy is therefore to file inexpensive provisional patents and, wherever possible, to desist from expensive filings except where a potential licensee has expressed interest in securing a license.¹³

Should the University decide to proceed with the patenting or registration of an invention of which it is the owner, the costs of registration of the patent, model or plant breeders' right shall be carried by the University.

In cases where the University decides not to patent or register an invention of which it owns the intellectual property rights, the invention is turned over to the NIPMO for exploitation. If NIPMO fails or declines to exploit the invention, it is returned to the relevant inventor who is at liberty to proceed with registration of a patent, plant breeders' right or model and utilization of the invention in question, for his or her own account (profit and loss).¹⁴

¹² MRC *Intellectual Property Policy 2004* p12.

¹³ MRC *Intellectual Property Policy 2004* p11.

¹⁴ *Intellectual Property Rights from Publicly Financed Research and Development Act, 51 of 2008, section 5 (2)(d).*

Staff members or students may not proceed, with the preliminary or final registration of a patent, plant breeders' right or model in respect of any invention made in the normal course and scope of his/her employment or studies, on their own initiative or via a patent attorney, as ownership of such inventions vests in the University.

If the University bears the costs of the registration of a patent, plant breeders' right or model, the University is also entitled to decide on the geographical area in which the patent, plant breeders' right or model is to be registered. If the inventor is of the opinion that the patent, plant breeders' right or model should also be registered in other countries, this shall be done only if the inventor is prepared to bear the concomitant costs.

3.7 The intellectual property advisory panel

The Deputy Vice-Chancellor: Research, Innovation and Technology appoints an advisory panel to:

- establish a broader university-wide participation and co-determination of innovation issues,
- advise on the procedure to be followed to settle any disputes that might arise in the application of this policy, and other IP related decisions.¹⁵
- Intermittently, for purposes of policy revision, make strategic recommendations regarding the management and exploitation of NWU IP to the university;

The Innovation Advisory Panel consists of the following permanent members:

- Executive Director: Research and innovation
- Director: TTIS Office
- Manager: TT
- One representative of the Legal Office
- Vice Rector: Academic of each campus
- Additional ad hoc members co-opted by the relevant Executive Director

Inventors or the line managers of inventors may be invited on an ad hoc basis to discuss specific issues related to innovation.

Decisions are taken on a consensus basis. Should consensus not be reached on any related matter, the decision of the relevant Executive Director is final. In such a case the Vice Chancellor shall be informed about the dispute and decision (it being understood that all policies are approved by Council).

The Intellectual Property Advisory Panel will convene on an *ad hoc* basis, as needed, but will convene at least once per annum.

3.8 Software

Copyright protection applies to software, but patenting is also applicable if such software complies with certain conditions. For this reason and owing to the high profile of software in present-day technology, this type of invention is dealt with as a separate section in this Policy document. The vesting of intellectual property rights in software is explained in Part 2, paragraph 2.1.9, and contract workers in particular have to exercise caution in respect of software developed in the course of their contract work. Employees and contract workers are prohibited from using, distributing, reproducing, removing or otherwise taking a copy with them on the expiry or termination of their contract or employment at the University, any software developed by them in the normal course and scope of their duties at the University, including all

¹⁵ MRC *Intellectual Property Policy 2004* p12-13.

accompanying development material, whether written, electronic or in any other format, unless such use has been explicitly authorized by the University.

Furthermore, the staff member must keep the contents, structure and methodology of the software confidential at all times while in the employ of the University and thereafter, unless disclosure thereof has been authorized.

Staff members and students must disclose new software that they are developing to the TTIS OFFICE at the flowchart stage, since it is important to identify timely all the possible intellectual property rights that may emanate from such software, in order to protect these rights effectively.

4 Part 4: Exploitation of knowledge base

Section 11(1) of the Act allows the University to determine the nature and conditions of intellectual property transactions relating to any intellectual property held by it, provided that preference is given to:

- a) non-exclusive licensing;
- b) BBBEE compliant entities and small enterprises;
- c) parties that seek to use the intellectual property in ways that provide optimal benefits to the economy and quality of life to the people of the Republic;
- d) exclusive license holders that undertake, where feasible, to manufacture, process and otherwise commercialise within the Republic.

The University is committed to both the principles and the practical implementation of broad based black economic empowerment. To this end, it will follow a phased approach to implement, measure and monitor progress on black economic empowerment and will strive to reach the targets set by the Codes of Good Practice, promulgated in terms of the Broad-based Black Economic Empowerment Act, 53 of 2003.

Without compromising quality, standards, service levels or price, the University will follow a fair, equitable, transparent, competitive and effective process that will enable all BBBEE compliant entities and small enterprises, regardless of race, gender or ethnicity an equal opportunity to do business with the University, whilst complying with the requirements of the BBBEE legislation.

4.1 Implementation of Expertise through spin-off companies

In July 2008 a policy with regard to the implementation of expertise and commercialisation at the NWU was adopted¹⁶. It must be read in conjunction with what follows below.

The University may decide, after consultation with the inventor or entrepreneur and/or line manager, to exploit intellectual property by means of assignment, licensing, strategic partnerships, the establishment of spin-off enterprises or any other appropriate means at its sole discretion.

The University, the inventor or entrepreneur, and other possible partners may own equity or members' interests according to a division that is agreed upon beforehand, within the policies of the University (such as the Conflict of Interest and Conflict of Commitment policies). The University may hold a majority share in equity in spin-off companies that form part of an extension of the University's core business and academic and research programmes.

¹⁶ Implementation of Expertise and Commercialisation at the NWU; July 2008

NWU may also assist start-up companies that are based on University owned IP, by holding a minority share in equity for a limited period of time.

The University reserves the right to develop and to implement an exit strategy for spin-off companies.

The commercial viability of spin-off enterprises shall be investigated by the TTIS OFFICE after a staff member has disclosed to the relevant Director and/or Dean his/her interests in private enterprises and entities. Thereafter, a process, as determined by the Director: TTIS Office, shall be followed where *inter alia* the following services and support are rendered in partnership with the inventor or entrepreneur:

- 4.1.1 identifying a suitable entrepreneur;
- 4.1.2 training of entrepreneur in business principles;
- 4.1.3 drawing-up of a business plan to the satisfaction of the Institutional Management of the NWU or designated body;
- 4.1.4 finding strategic partners;
- 4.1.5 making incubation space and access to facilities available;
- 4.1.6 making a mentor available (mentors are not necessarily staff members and are persons with a business background);
- 4.1.7 making legal and financial services available;
- 4.1.8 use of the University's financial system (cost centres); and
- 4.1.9 use of the University's human resource functions.

The University may render the services and support in paragraph 4.2 above, to the new enterprise in exchange for either equity or payment for services rendered

The TTIS OFFICE primarily performs an incubation role within the University and will not necessarily invest in an enterprise, although the possibility cannot be excluded. Investments shall be made strictly on a business basis by Institutional Management, taking into account a business plan and all other relevant information.

In the case of office space or laboratory equipment that is utilised, a proper lease agreement shall be concluded with the spin-off enterprise. Such lease agreement shall at all times put the academic interests of the University first.

4.2 Agreements

The NWU is a legal entity and the authority to sign agreements on its behalf is restricted and governed by a policy annexure: Authorisation levels (Signing authority) dated 16 March 2007. Cognisance must also be taken of the Policy for Management of Research and Innovation Contracts as approved by Council on 20 June 2008. All intellectual property transactions must include the following prescribed statements as per regulation 11 and 12:

- (1) The Parties acknowledge that the intellectual property under this transaction was created with support from the South African Government; and is subject to the requirements of the South African Intellectual Property Rights from Publicly Financed Research and Development Act, 2008 and its regulations ("Act 51 of 2008"). The South African Government has certain rights to the intellectual property in terms of sections 11(1)(e), 11(2) and 14 of Act 51 of 2008.
- (2) The Parties understand and agree that commercialisation of the intellectual property must ensure that the intellectual property is used for the benefit of the Republic.

- (3) The Parties acknowledge the irrevocable and royalty-free right of the State to use or have the intellectual property used on behalf of the Republic , for the health, security and emergency needs of the Republic.
- (4) The Parties are aware of the National Intellectual Property Management Office's (NIPMO) rights in terms of section 14(4) of the Act, if the intellectual property is not commercialised within the reasonable period set out in this exclusive licence agreement

4.2.1 Consortium, Collaboration and Research

It is the responsibility of members of the NWU to be aware of IP clauses of research, collaboration and consortium contracts, and to ensure that the terms of such agreements with third parties do not conflict with the terms in these guidelines. Any questions regarding the NWU's policies may be directed to the TTIS OFFICE.

4.2.2 Confidentiality Agreements (Non-Disclosure Agreements – NDA's)

It is the responsibility of members of the NWU to ensure that a signed NDA is in place should it be necessary to discuss proprietary creations or discoveries with third parties. In general, it is rarely required to have full disclosure when discussing research with third parties and this should always be the preferred option. The TTIS OFFICE will advise on what may be disclosed without requiring a NDA.

If disclosure is required, only personnel authorized in terms of the above mentioned policy have the authority to sign NDA's. Such agreements must be in the form and substance acceptable to the Legal office. The agreement should be signed in duplicate: one original to be filed at the legal office; the other original to be retained by the recipient; a copy to be retained by the research unit or department; and a copy must be forwarded to the TTIS OFFICE for filing.

4.2.3 Material Transfer Agreements

Material transfer agreements cover the use of tangible materials such as monoclonal antibodies, genes, nucleic acid probes and promoters, clones, cell lines, plasmids, viruses, seeds, whole animals, etc. It is the responsibility of IP Creators to inform the research director or equivalent, of any proposed transfer of NWU material to either commercial or non-commercial concerns.

The TTIS OFFICE will assist in compiling the MTA if required. Research directors or the equivalent, shall inform the TTIS OFFICE of any such agreement, which must be in the form and substance acceptable to the TTIS OFFICE. The agreement should be signed in duplicate: one original to be filed at the legal office; the other original to be retained by the recipient; a copy to be retained by the research unit or department; and a copy must be forwarded to the TTIS OFFICE for filing.

4.2.4 Consulting Agreements

Employees of the NWU are not allowed to enter into agreements related to outside employment, such as consulting agreements, without affirmative notice to the prospective employer that the Intellectual Property Rights of the NWU cannot be subordinated to a third party consulting or employment agreement.

4.2.5 Contracts involving Traditional Knowledge and Indigenous Knowledge Systems

All contracts relating to the research, use and application of traditional knowledge and traditional technologies must be reviewed and approved in consultation with the NWU Ethics Committee. Where required, the TTIS Office should be consulted in order to ensure compliance with the all relevant legislation such as the Biodiversity Act, the IP Amendment Act and the IPR Bill.

4.2.6 Licensing agreements

This type of agreement is used to bestow either exclusive or non-exclusive rights on the contracting parties to research and or commercialize a discovery. The consequences of such agreements may be considerable and must be negotiated carefully with the assistance of the TTIS Office and the Legal office. Only authorized individuals may sign on behalf of the University once the TTIS Office has ensured that the contracting procedures have been complied with.

4.2.7 Shareholders agreements

Whenever the University is to hold equity in a spin-off company or any other enterprise, the University's interests must be protected with a duly negotiated and agreed shareholders agreement in writing. The TTIS Office may recommend suitable candidates to be appointed as directors on the boards of such companies on behalf of the University to ensure good governance practices for approval by the relevant Executive Director.

4.3 Conflict of interest

4.3.1 The following principles underlie the policy:

- Employees should not be in a position to influence the commercial decisions of the NWU or its associated or subsidiary companies in such a way that it may lead to reduced income for the Institution or its affiliates.
 - Employees, who may be, or may potentially be, in a position of Conflict of Interest, should promptly disclose any such situation to their line managers.
 - Should a potential Conflict of Interest arise, the NWU should be represented by staff members who are not directly or indirectly involved in the Conflict of Interest situation to ensure objectivity and to protect the affected employee(s) from undue acquisitions.
 - The relevant Dean has the ultimate responsibility, with input from the Institutional Director: Innovation and Research Support, to regulate the Conflict of Interest situation.

4.3.2 Conflict of interest policy:

The current Conflict of Interest Policy of the NWU dated:

5 Part 5: Division of funds from the commercialisation of intellectual property

The University, through its TTIS OFFICE, must in terms of new legislation “manage revenues due to it from intellectual property transactions and the commercialization thereof, including managing the benefit sharing arrangements with intellectual property creators at the institution;”

The TTIS OFFICE shall keep a record for each intellectual property contractual agreement that generates royalty or dividend income. Earnings derived from the commercialization of intellectual property shall be divided in accordance with the new criteria as required by law.

5.1 The division formula

The division of the **first** One(1) Million Rand of income is made before the deduction of any expenses, *id est* on the gross income, in accordance with legislation:

- 30%, to the inventors which are to be divided among them as per agreement;
- 20% to the focus area or school to which the project is linked (pro rata if more than one focus area is involved);
- 20% to the faculty concerned (pro rata if more than one faculty is involved);

- 15% to the Incubation Fund of the University; and
- 15% to the TTIS OFFICE

Thereafter, **any further** income is distributed after the deduction of any and all accumulated commercialisation and patenting expenses, *id est* on the netto income, in accordance with legislation:

- ✓ 30%, to the inventors which are to be divided among them as per agreement;
- ✓ 20% to the focus area or school to which the project is linked (pro rata if more than one focus area is involved);
- ✓ 20% to the faculty concerned (pro rata if more than one faculty is involved);
- ✓ 15% to the Incubation Fund of the University; and
- ✓ 15% to the TTIS OFFICE

5.2 Additional legal provisions

IP creators are to receive their portion of the revenues from commercialisation of IP created by them and governed by the IPR-PFRD Act no later than 12 months after the date of receipt of such revenues by the University.

Such payments shall continue until the contract producing the revenue is terminated???

The University acknowledges that the right of benefit sharing extends to IP creators after their resignation and/or the termination of work and in case of death extends to their lawful heirs.¹⁷

5.3 Non-monetary benefits

This policy applies equally to non-monetary benefits and is not limited to certain provisions. Non-monetary benefits may amongst others, manifest as bursaries, rebates or services in lieu of a monetary benefit. Donations of any kind are excluded by definition. A clear distinction must be drawn between non-monetary benefits for research and development and non-monetary benefits received for commercialisation of intellectual property.

Shares and equity are not considered to be non-monetary benefits, but merely a different manifestation of a monetary benefit. As such inventors may agree to receive shares in a spin-off company set up for the purposes of commercialising the intellectual property, instead of sharing in the income as stipulated above. In such a case the agreement between the NWU and the inventor/s to waive the distribution of income in favour of shares must be reflected in:

- ✓ The shareholders agreement in cases of NWU holding shares in the spin-off; or
- ✓ The licensing agreement between the NWU and the spin-off in cases where the NWU does not own any shares in the spin-off.

¹⁷ Section 10 of IPR-PFRD Act, 2008

The minimum shareholding must be based on a reasonable estimate of what the inventor would have earned if the income to NWU was distributed according to the formula above.

It is of paramount importance to the NWU that the inventors receive real benefits. The NWU also wish to avoid the possibility of tax evasion by the giver of non-monetary benefits. Therefore, the NWU will avoid any licence agreement where non-monetary benefits are offered in the place of technology fees or royalty income for the commercialisation of intellectual property. In any event the rewards due from non-monetary benefits are to be negotiated with the relevant inventors.

6 Part 6: Indigenous knowledge systems

6.1 Introduction

The North-West University registers its commitment to the recognition, promotion, development, protection and affirmation of IKS.

The University has an IKS Centre of Excellence at its Mafikeng campus and through the work of this Centre the University wants to align its efforts with the National Policy on Indigenous Knowledge, 2004. An extract of the most relevant parts appears on the website at:

<http://www.nwu.ac.za/research/technologytransfer/supportservices/iks.html>

NWU is an institution that develops and promotes knowledge through research, teaching and community outreach. However, knowledge leadership today is determined by the creation and harnessing of knowledge and its ability to convert knowledge into wealth and eradicate poverty.

In order for Indigenous Knowledge to contribute to the conversion of knowledge into wealth and eradicate poverty it must be protected through an inclusive IPR policy and legal framework which takes into account IKS imperatives, especially as it relates to the following:

- (i) it benefits the national economy because products based on IKS such as handicraft, medicinal, agricultural and pharmaceutical products are traded, nationally and internationally;
- (ii) indigenous knowledge and resources are used as input into modern industries e.g. pharmaceutical, botanical cosmetics, agriculture and biotechnology;
- (iii) to prevent Biopiracy /Unauthorized use or extraction of biological resources associated with IK;
- (iv) assimilate IK into the mainstream economy (commercialization); (v) to conserve the environment;
- (v) to improve the livelihood of IK holders;
- (vi) and to comply with International Treaties associated with the use of IK and resources.

The global trends in the use of IKS and associated resources have implications for the Intellectual Property Rights (IPR) policy. It is on the basis of this that institutions of learning and research involved in the promotion of IKS such as the North-West University should ensure that their IPR policies are consistent

with international and regional policies, legal frameworks, practices and debates including those of WIPO, WTO, ARIPO, ORAPI and PIPER¹⁸.

The NWU institutional IPR and IKS policy must be in compliance with the provision of section 6(1) of the Intellectual Property Rights from Publicly Financed Research and Development Act, 51 of 2008.

7 Part 7: Annexures

7.1 ANNEXURE A: Glossary

For the purposes of this Policy, the concepts listed below have the following meanings:

Commercialisation

A broad term used for the process of generating income from all available commercial resources. University resources include study material, hand books, software, management systems, analytical or any other services, chemical formulations, rentable facilities, sellable products and processes, knowledge and know-how, facility management, etc. As long as there exists an outside party willing to pay for any resource, it could be commercialised. The process of commercialisation includes activities like market segmentation, partner selection, marketing and promotion, budgeting, contracting, distributing, pricing, renting, selling, consultation, etc. Commercialisation is therefore a subset of Innovation.

Consultation vs. Contract research

Consultation

Consultation takes place when a staff member who has obtained permission from the University to do private work makes his or her expertise available to a third party on commission, in exchange for compensation. During consultation, expertise is normally applied creatively and problem solving may take place. This consultation also normally occurs without use being made of the University's infrastructure or the University's other staff or students. Knowledge is usually not created during consultation, but is merely applied.

Contract research

In contrast to the above, knowledge is created during contract research. Contract research is commissioned by an outside organisation and the University's infrastructure is normally used. Other staff and/or postgraduate students of the University are usually also actively involved in contract research. Contract research at or for an outside organisation must take place in accordance with paragraph 2.1.4.

Conflict of Interest

A divergence between employees' private interests and their professional obligation to the University in such a way that an independent observer might reasonably question whether the employees' professional actions or decisions are determined or influenced by considerations of personal gain, financial or otherwise. It includes an action, omission or situation which may or may not appear to compromise the objectivity of an employee's design, conduct or reporting of a project. A Conflict of Interest will exist when an employee, a

¹⁸ Kaya HO & Iya P *Positioning of North-West University IPR policy within an inclusive IPR and IKS Policy* p1 2008.

direct family member or associated legal entity of such an employee (e.g. company, closed corporation or trust) has an external economic interest that effects or provides an incentive to affect the employee's conduct and responsibilities at NWU. In other words, an employee holding equity, being a director, being in a managerial position, being in any controlling position for or not for Economic Interest in a company or other legal entity which has commercial ties with the University either as vendor, supplier, subcontractor, licensee, licensor, grantor, research assignor or assignee, would be regarded as being in a Conflict of Interest situation. The principle of Conflict of Interest is therefore not a question of employees not doing their job satisfactorily (Conflict of Commitment), but whether they are in a position to make or influence a decision which could affect their personal interests in contrast with those of the NWU.

See a copy of the policy at:

http://www.nwu.ac.za/opencms/export/NWU/html/gov-man/policy/Conflict_of_interest_policy.pdf

Conflict of Commitment

Employees are expected to satisfy all the requirements of their employment, and should not permit outside activities to interfere with the performance of their NWU obligations. Conflict of Commitment is usually easily defined and recognized, since it involves a perceptible reduction of the employee's time and energy devoted to NWU activities. Time allocated to external activities should be recognized and defined in the employee's Task Performance Agreement with the University.

Economic Interest

This includes an employee's interest in obtaining a shareholding, management position or board membership and any other fiduciary relationship (liability to protect and perform) with an organization other than the NWU. It includes anything of monetary value or in kind, but not limited to, salary, commission, fees, subsidies, grants, honoraria, equity interests, intellectual property rights, royalties or gifts.

Entrepreneur

Entrepreneur in English is a term applied to the type of personality who is willing to take upon herself or himself a new venture or enterprise and accepts full responsibility for the outcome. In common understanding it is taken as describing a dynamic personality. An entrepreneur is an individual who efficiently and effectively combines the four factors of production. Those factors are land (natural resources), labor (human input into production using available resources), capital (any type of equipment used in production i.e. machinery) and Enterprise (intelligence, knowledge, and creativity.)

Entrepreneur is often synonymous with founder. Most commonly, the term entrepreneur applies to someone who creates value by offering a product or service. Entrepreneurs often have strong beliefs about a market opportunity and organize their resources effectively to accomplish an outcome that changes existing interactions.

The word "entrepreneur" is a loanword from French. In French the verb "entreprendre" means "to undertake", with "entre" coming from the Latin word meaning "between", and "prendre" meaning "to take". In French a person who performs a verb, has the ending of the verb changed to "eur", comparable to the "er" ending in English.

Enterprise is similar to and has roots in, the French word "entrepris", which is the past participle of "entreprendre". Entrepreneur is simply the French feminine counterpart of "entrepreneur".

Indigenous Knowledge

Indigenous knowledge refers to the knowledge, innovations and practices of indigenous and local communities around the world. Developed from experience gained over the centuries and adapted to the local culture and environment, indigenous knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds. Indigenous knowledge is mainly of a practical nature, particularly in such fields as agriculture, fisheries, health, horticulture, and forestry.

Industrialisation

It is the process of preparing and finalising an idea for the market (the consumer). Industrialisation relies heavily on system engineering and the process is started by identifying the needs of the consumer. The next step in the process is to define the specifications of and eventually finalise the product, service or process that fulfils consumer needs, whilst also taking into account all the possible statutory, safety, environmental, production and packaging requirements. Industrialisation is a very expensive and time-consuming process and requires the involvement of specialists. The intensity of the process will depend on the nature of the invention and the requirements of the market it is aimed at. It is possible that the process may be simple, but in most circumstances it is complex.

Innovation (To make something new)

Innovation refers to the creation of technology (methods and processes) and the tools utilised during the process of creation. The entire process is included here, from the moment the idea is created to the point where it is brought to completion or deployment. The process consists of a series of sub-processes which may run consecutively or simultaneously. The process of innovation involves a variety of sciences and disciplines and will always consist of at least three phases, irrespective of the complexity of the innovation. The three phases require very specific, and sometimes conflicting, approaches and must therefore be managed and facilitated with this in mind. The three phases are:

- the creation or invention of new ideas, methods or approaches
- the demonstration of the functionality of the ideas and methods
- the deployment of the ideas and methods (Industrialisation, Commercialisation and Technology Transfer)

The creation of art (a painting, sculpture, an art photograph, a composition, etc.) is different from technological innovation in that the piece of art itself is seen as an artefact and, in addition, is characterised by creativity. The method by which the piece of art is created, though, could well be technologically innovative.

‘Creation’ and ‘invention’ have two driving forces, namely “things can be done in a better way” and “I want to do things in a better way”. This phase primarily takes place in the research and experimentation activities of the university. Lateral and creative thinking, as well as freedom to a great extent in respect of time and process, are required.

The demonstration phase proves the functional workability of the idea. This phase also takes place as part of the research and experimentation activities of the university, but external experts are also used frequently.

Freedom is restricted to a greater extent, due to the fact that the process and time scales that are used are of greater importance.

Deployment refers to the systematic preparation of the technology to make it available for general use. This includes the use of the technology to better processes or to generate an income from the technology. In this phase the process and time scales are of the utmost importance and project management is at the order of the day.

The three phases require specific approaches and abilities which are seldom found in one person.

Intellectual capital

Intellectual capital comprises the sum total of intellectual property and other forms of tangible and intangible assets that normally exist within a company context. These other intangible assets include, but are not limited to, the following: capital, reputation, operating systems, expertise, experience, trade secrets, knowhow, access to markets, access to distribution channels, and quality assurance.

Intellectual Property

For the purposes of this policy, Intellectual Property is defined as any new or useful process, machine, composition of matter, life form, article of manufacture, software, copyrighted work, and know-how and information associated with the above. It includes but is not restricted to such things as new or improved devices, circuit layouts, chemical compounds, drugs, genetically engineered biological organisms, data sets, databases, software, or unique and innovative uses of existing inventions. Innovations in the social sciences are also considered to be intellectual property, provided that they are novel and have social and/or economic application. Intellectual Property may or may not be protect able under legislation, and may be tangible (e.g. biological organisms, plant varieties, computer software, engineering drawings etc.) or intangible (e.g. patents, copyrights, ideas, tacit knowledge etc.). There are broadly two types of Intellectual Property, those that require formal registration and those that do not.

Forms of IP that require registration:

1. *Patent* – a grant by the patent office to an IP Creator of the right to exclude others from making, using, or selling their creation or discovery. Patents do not protect ideas, only structures and methods that apply technological concepts. Each type of patent confers the right to exclude others from a precisely defined scope of technology, industrial design, or plant variety. In return for the right to exclude, an IP Creator must fully disclose the details of the creation or discovery to the public so that others can understand it and use it to further develop the technology. To be patentable, an invention must be novel, have utility, and differ from what skilled users might expect (non-obvious).

2. *Trademark* – a distinctive word, design or graphic symbol or combination of word and design that distinguishes and identifies the goods and services of one party from those of another.

3. *Plant Breeders' Rights* – exclusive commercial rights to a registered plant variety. The rights are a form of Intellectual Property and are administered under the Plant Breeders' Rights Act of 1976. To be eligible for protection, a plant variety must adhere to three broad criteria, i.e. distinctiveness, uniformity and stability.

Forms of IP that do not require registration (cannot be registered):

4. *Confidential Information* – includes trade secrets, know-how or other information that involves an obligation of confidentiality. There is no legislation available to protect confidential information; however, common law principles apply and protection depends on the relationship between the parties.

5. *Copyright material* – provides legal rights, including but not limited to, written material, artistic, musical and dramatic works, computer programmes and software, compilations, films, sound recordings, broadcasts, published editions and performances. Copyrights confer an exclusive right on the creator of a work to exclude others from reproducing it, adapting it, distributing it to the public, performing it in public, or displaying it in public. Copyright does not protect an abstract idea; it protects only the concrete expression of an idea. To be valid, a copyrighted work must have originality and some modicum of creativity. Please note that copyrights can be registered in some countries.

Intellectual Property (IP) Creators/Inventors

It is a legal term which describes a person who intellectually contributes to the conception of an inventive idea and/or the reduction thereof to practice of an invention. They are individuals who are deemed to have made an intellectual contribution to the creation and/or development of IP arising from NWU sponsored research. They do not include individuals that have only carried out the research tasks or supplied materials. IP Creators should be identified at the outset (usually as part of the invention disclosure) and are not necessarily those appearing as authors on a scientific publication. To be recognized legally, a co-inventor must have conceived of an essential element of the invention or contributed substantially to the general concept.

Intellectual Property (IP) Enablers

They are assistants, technicians and other individuals who have indirectly contributed to the creation of Intellectual Property arising from NWU sponsored research and without whose intellectual or practical contribution, commercial application would not have been possible.

Intellectual property rights

This refers to intellectual property as defined above, of which the exclusive right of ownership, with the attendant rights and obligations, belongs by law to a natural or a legal person (company, trust, institution). Such an owner may license another party to make use of the intellectual property, but the owner retains ownership.

IPR management

A process whereby inventions resulting from research or experimentation are disclosed, analysed and patented (or protected via other less often used forms of legal registration) in order to form a firm legal basis for commercialisation and technology transfer. It includes management of all IP related issues in a contract resulting from commercialisation.

Invention

A novel and useful idea relating to IP processes, machines, manufactures, and compositions of matter. It may cover such things as new or improved devices, systems, circuits, chemical compounds, mixtures, etc. The term “invention” also includes all inventions to the extent where they have not been patented or registered, but rather acquire protection as confidential knowledge. A discovery is not an invention. It is probable that an invention has been made when something new and useful has been conceived or developed, or when unusual, unexpected, or non-obvious results have been obtained and can be exploited. An invention may be the product of a single individual or a group of individuals who have collaborated on a project.

Invention Assignment

An agreement with the NWU executed by inventors as a condition of employment and upon disclosing their innovation to NWU TTIS OFFICE. Innovators agree to assign to the NWU ownership of innovations and intellectual property rights to innovations made using NWU resources.

License agreement

A legal contract between the NWU and another entity (often a company) that allows the use of a NWU innovation under agreed terms and conditions that are amenable with the goals of the innovator and match the nature and development stage of the innovation.

Licensee

Any company, non-profit organization, or individual who licenses a NWU innovation for their own use or to commercially develop the innovation into a product or service.

Licensing revenue

Revenue such as royalties, technology fees or any other form of payment for the right to use NWU IP, earned through licensing NWU innovations. It is distributed by NWU TTIS OFFICE to innovators, their colleges/departments/laboratories, and to NWU research funds. Royalties are normally based on gross or net income generated by the licensee.

MTA (Material Transfer Agreement)

Material Transfer Agreements (MTAs) are contracts that cover the transfer of specific research materials into, or out of, the NWU.

NDA (Non-Disclosure Agreement)

A legal document for the protection of proprietary information.

Net Income

Gross royalties or revenues minus administrative, licensing, legal and other related expenses.

Open Source Software

Refers to software that is developed, tested, or improved through public collaboration and distributed with the idea that it must be shared with others, ensuring open future collaboration. The underlying programming code (the source code) of the open source software is made available under a license that gives users the freedom to access, modify and run the program for any purpose, and to redistribute copies of either the original or modified program, without having to pay royalties to previous developers.

Patent

A patent for an invention is the grant of a property right by the government, which allows the patent holder to exclude others from “working” the invention: making, using, offering for sale, or selling the invention in the RSA or “importing” the invention into the RSA.

PCT (Patent Cooperation Treaty)

It is one of 6 international treaties that are classified as Global Protection Systems. It is an international patent law treaty that provides a more efficient, unified procedure for filing patent applications. The States party to this Treaty (hereinafter called "the Contracting States") constitute a Union for cooperation in the filing, searching, and examination, of applications for the protection of inventions, and for rendering special technical services. The Union shall be known as the International Patent Cooperation Union.

Public disclosure/publication

Any public written or oral discourse that describes an innovation or only a part thereof and not even in detail. “Publication” is broadly interpreted to include journal articles, posters, slides, talks, conference proceedings, abstracts on the Web, theses and dissertations that are available to the public, and discussions with corporate researchers and company personnel.

Public domain

The status of innovations that are not protected by patent or copyright. Innovations in the public domain can be appropriated by anyone.

Research

The creation, preservation, accumulation and improvement of knowledge by means of scientific investigations and methods in the field of the medical and related sciences as well as those sciences the application of which is important for the promotion of health or the combating of disease, and includes the acquisition, development and transfer of expertise and technology, and “researcher” has a corresponding meaning (as defined in the MRC Act No 58 of 1991).

Research materials

Materials used in research that can be exchanged between academic institutions and corporations or non-profit institutions. These include cell lines, proteins, transgenic animals, and chemical compounds.

Right of first refusal

When A has granted B a right of first refusal, A is not obliged to sell but if he/she should want to sell, B must be given preference, and if A receives an acceptable offer

from C, the property must first be offered to B at the price A can obtain from C (*Hiemstra & Gonin, Juta, 1986*). If A has granted B an option, however, A is obliged to sell.

Serendipitous knowledge

Serendipitous knowledge refers to all inventions, designs and expertise, whether registrable as intellectual property rights or not, which could not reasonably have been foreseen by the principal or the staff member involved in the commissioned work, be it consultation or research. A typical example is where a staff member is commissioned to conduct clinical trials on a new compound, and then discovers coincidentally and outside the scope of the commission that the active compound can also cure another disease.

Software

Sets of instructions or data that tell a computer what to do. Software is often divided into two categories: system software, which includes the operating system (e.g., Windows 95, MacOS) and all utilities that enable the computer to function; and applications software, which includes programs that perform specific tasks (e.g., word processors, spreadsheets, and databases).

Sponsored Research

Research, training and instructional projects involving funds, materials or other compensation from outside sources under agreements between the sponsoring agent and the NWU.

Task Performance Agreement

Employees and Management agree annually on the tasks and output required from employees to achieve the overall objectives of the University. Any potential Conflict of Commitment and Conflict of Interest should be resolved through acceptable arrangements in the Task Performance Agreement.

Technology

According to Van Wyk, RJ, technology is “created competence as manifested in devices, procedures and acquired human skills”. Technology, therefore, reflects on *how* things are being done, rather than *what* is being done. Technology does not only deal with the artifacts or hardware itself, but with methods and processes also. The artifact or piece of hardware, however, has been created through a process (technology) and are used in other processes. All people are involved with technology. The methods for teaching, doing research and writing articles are all examples of technology.

The development and deployment of technology is to make life (and work) easier through methods that minimise effort, risk, costs, stress and intellectual effort. Technology thus has reference to the replacement, simplification or expansion of human abilities, viz. the physical, motor and intelligence functions.

The term "technology" mustn't automatically be associated with the term "technical"; technology can be developed in any science, e.g. arts or natural sciences.

Technology transfer (also see innovation)

It is a subset of industrialisation and commercialisation where great emphasis is required to transform the technology or intellectual property into a sellable form ready for the market. It deals with two major processes in parallel:

- a. Firstly, industrialisation refers to the process of preparing the technology or intellectual property for the market. Industrialisation relies heavily on system engineering and the process is started

by identifying the needs of the consumer. The next step in the process is to define the specifications of and eventually finalise the product, service or process that fulfils consumer needs, whilst also taking into account all the possible statutory, safety, environmental, production and packaging requirements. Industrialisation is a very expensive and time-consuming process and requires the involvement of specialists. The intensity of the process will depend on the nature of the invention and the requirements of the market it is aimed at. It is possible that the process may be simple, but in most circumstances it is complex.

- b. Secondly, commercialisation refers to the process followed to prepare the market for the technology or intellectual property and defined under 7 above.

The University has an obligation to commercialise its research results. Technology transfer requires disciplined project management where on-time, on-brief and on-budget delivery is essential.

Technology Transfer and Innovation Support (TTIS)

The TTIS Office manage and coordinate all matters related to technology transfer and innovation support of the NWU, within the policies of the NWU, such as the contracts management policy.

Trade secret

Technical/trade information or know-how that is generally unknown to the public, is held in secret, and has economic value for the possessor. Trade secrets may warrant management by NWU.

Trademark

A word, phrase, symbol or design, or a combination of words, phrases, symbols or designs, that identifies and distinguishes the source of the goods of one party (such as a manufacturer or seller) from those of others.

USPTO (United States Patent & Trademark Office)

The US agency that issues patents to inventors and businesses for their inventions and provides trademark registration for product and intellectual property identification.

7.2 ANNEXURE B: Bibliography

Acts

Biodiversity Act, 10 of 2004

Competition Act, 89 of 1998

Copyright Act, 98 of 1978.

Counterfeit Goods Act, 37 of 1997

Designs Act, 195 of 1993

Intellectual Property Rights from Publicly Financed Research and Development Act, 51 of 2008.

The Patents Act, 57 of 1978.

Plant Breeders' Rights Act, 15 of 1976

Trade Marks Act, 194 of 1993

NW University Policies and Plans

Policy on the generation and approval of policies, 22/06/2007;

Conflict of Interest policy, 24/11/2006;

Guidelines for patenting, and the commercialisation of research outputs March 2005;

A draft/interim document on guidelines / controls for financial transactions supporting and extending the financial policy, 22/02/2008;

Conditions of Employment,

Manual for Post Graduate Studies, 18/06/2004 updated 01/2008.

Remuneration policy, 23/09/2005.

Performance management policy, 06/12/2005.

Policy for Management of Research and Innovation Contracts, 20/06/2008

Annexure: Authorisation levels (Signing authority).

Institutional Plan 2008-2010.

Short Courses Policy, 31/08/2005.

Research and Innovation Policy, 23/11/2007.

Implementation of Expertise and Commercialisation at the NWU; July 2008.

North-West University : Institutional Plan 2008 – 2010.

Unofficial documents

Commercialization strategy and proposal summary, F van Niekerk, 24/07/2008;

POLICY: Functioning of the Faculty of Health Sciences of Health Sciences Commercialization Committee.

TITLE: Conflict of Interest during Commercialization, 03/07/2008.

Vergoeding aan student; Fisika; not dated.

Community projects,

Other Policies

Australian Vice Chancellors-Committee, Ownership of Intellectual Property in

Universities, Policy and Good Practice Guide, 2002.

Kaya HO & Iya P Positioning of North-West University IPR policy within an inclusive IPR and IKS Policy 2008.

MRC intellectual Property Policy 2004

Policy in Respect of Exploitation of Intellectual Property Stellenbosch University 2004.

Articles & books

AUTM *Technology Transfer Practice Manual* Vol 1,2 &3 2008.

EU, *Guide to Intellectual Property Rules for FP7 Projects* version 28/06/2007

Krattiger A, et al, *Intellectual Property Management in Health and Agricultural Innovation*. Vol 1 & 2 & Executive guide. MIHR & PIPRA 2007.

WIPO, *Intellectual Property for Business series*: number 4 2008

Other Universities

Pittsburgh University

Stellenbosch University

University of Australia

University of Pretoria

University of the Sunshine Coast

University of Virginia

University of Washington

Current details: C:\documents and settings\administrator\my documents\Rules and Guidelines for Management of Intellectual Property at the NWU.doc
13 September 2010

File reference: 1Pr/1.1.10

Original details: Jacoline Jansen van Vuuren(10225676) C:\Documents and Settings\Administrator\Desktop\1P-1.1.10-Management of IP.doc
10 September 2010

Current details: Jacoline Jansen van Vuuren(10225676) C:\Documents and Settings\Administrator\Desktop\1P-1.1.10-Management of IP_e.docx
14 September 2010

File reference: 1P/1.1.10