A STRATEGIC FRAMEWORK FOR THE DEVELOPMENT OF RESEARCH AT THE UNIVERSITY OF THE FREE STATE

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EXECUTIVE SUMMARY

1. The leadership of the University of the Free State recently committed themselves to an innovative focus on research as one of the three core functions of the University, being the aspect that usually determines the reputation of a university. Research at the UFS must now be developed, with a shift of emphasis from the administrative to the strategic management thereof.

2. The Department of Education amended the subsidy formula for higher education institutions which will come into effect in 2004, in order to place a much stronger focus on research outputs. According to conventional measuring methods, the University is still one of the six top research universities in South Africa.

3. This document thus offers a framework within which detailed action plans, after further refinement, can be developed for implementation during 2003–2006.

4. Figure 1 indicates the overall objective to develop a research culture through a strategic focus to research development underpinned by 5 supportive objectives, namely Quality Assurance, Equity, Financial Sustainability, Effective Support Systems and an Output Dimension. These objectives are aligned with the University’s overall strategic objectives.

A brief rationale for each of these objectives is provided.

5. Internationalization of universities is driven by research and post-graduate study, and not by the presence of undergraduate students or other factors.

A discussion document on the restructuring of internationalization at the University has been prepared.

6. It is proposed that consideration be given to establish a Directorate: Entrepreneurship (and Commercialization) to strategically manage University-enterprise partnerships and income-generation activities.

7. The overall objective of the Directorate: Research Development is, in collaboration with others (Faculties), to create an environment at the University in which:
   ♦ Research can improve and flourish
   ♦ Researchers and post-graduate students feel that they are valued
   ♦ The University’s profile is enhanced, both nationally and internationally
Figure 1 Visual perspective of the research objectives

DEVELOP A RESEARCH CULTURE THROUGH A STRATEGIC FOCUS TO RESEARCH DEVELOPMENT

Ensure synergistic research policy directives, effective strategies and a strategic understanding of the research environment, with a personnel corps who understand and accept critical changes and new approaches in the university environment (both nationally and internationally)

- QUALITY ASSURANCE
  Ensure an internationally competitive research system through high quality researchers and effective and quality post-graduate training

- EQUITY
  Development of the research capacity of priority groups

- FINANCIAL SUSTAINABILITY
  Effectively increase income from external sources by projecting an image of a research-orientated university

- SUPPORT SYSTEMS
  Ensure user-friendly and effective systems that facilitate and support research at the University

- OUTPUT DIMENSION
  Stimulate research and increase research outputs by using internal funds effectively

Cultivate loyalty and enthusiasm for research through the recognition of progress and achievement at all levels
1. **A NEW FOCUS ON RESEARCH**

The leadership of the University of the Free State recently committed themselves to an innovative focus on research as one of the three core functions of the University, being the aspect that usually determines the reputation of a university. This was a significant and essential step. During the past few years, there has been a strong focus on transformation processes and financial recovery. Experience has proved that research is one of the first areas to be affected when other requirements are made of academic staff. This, in fact, is what occurred at the UFS; and it has now become necessary to strengthen the institutional culture of research once again. Research at the UFS must now be developed, with a shift of emphasis from the administrative to the strategic management thereof.

On the other hand, the successful transformation and financial reorganization have placed the university in a favourable position to address research at a critical stage in the development and transformation of the higher education sector. There is currently a marked focus on research in the country and in the mentioned sector. Among other steps, the Department of Education amended the subsidy formula for higher education institutions which will come into effect in 2004, in order to place a much stronger focus on research outputs. According to conventional measuring methods, the University is still one of the six top research universities in South Africa; and with its more extensive resources and stable academic environment, there is a good potential for obtaining rapid results with innovative approaches.

Universities sometimes make the mistake of attempting to promote research in a fragmented manner, without taking the environment and system within which it functions into account. This can easily lead to conflicting strategies and ill-considered interventions, with unexpected outcomes. Although a holistic approach possibly needs too many resources for simultaneous implementation, such an approach sensitizes decision-makers to the critical areas and priorities for step-by-step implementation.

In order to really make a difference within a short period, the system for research development at the university must be holistic, logically thought out, streamlined, focused and effective. The University’s leadership corps and staff should also be committed to realizing this aim. The value added by the Research Development Directorate within the system must far exceed the resources that it uses up. This will require innovative approaches and a professional, dedicated and service-oriented team co-operating closely with researchers and partners to the benefit of research at the University.

Thus, the approach that was followed in the compilation of this document, was that the structuring and determination of the role and functions of the Directorate: Research Development should be carried out with due consideration of all critical components in the system, and thus, also, in cohesion and close consultation with the leadership, the faculties and appropriate support services. After critical consideration of existing policy and systems, as well as thorough consultation with key figures at the University, this document thus offers a framework within which detailed action plans, after further refinement, can be developed for implementation during 2003–2006. This will be revised annually within the context of the University’s 3-Year Rolling Plan.
2. A SYSTEM FOR RESEARCH DEVELOPMENT

*Figure 1* indicates the key factors that influence a culture of research, and which can ultimately lead to more and better research outputs and a higher research profile for the University.

The integrated nature of the different components highlights the complexity of the system and indicates the importance of a holistic approach to research development.
Figure 1:

Culture of Research

- Vision and dedication of leadership corps to research
- External environment
  - Global
  - National
  - Local
- Internal environment: Competing forces and requirements
- Policy-making, priorities and strategies
- Success of Implementation

Resources:
- Financial
- Time
- Infrastructure

People:
- Attitude, enthusiasm and loyalty
- Quality of expertise
- Appropriateness of expertise
- Dedication, greater group participation
- Creativity and entrepreneurship
- Understanding of new environment

Academic and support staff
- Post-graduate students
- Partners

Systems (Including structures)
- Communication and marketing
- Mobilisation and distribution of funds
- Management / Decision-making
- Dealing with post-graduate students
- Co-operation / Partnerships
- Capacity-building
- Ethics
- Management information
- Bursaries
- Internationalization, etc.

Incentives;
Support;
Sensitisation.

Quantity and quality of research outputs; profile of the institution as a research university
3. OBJECTIVES FOR RESEARCH

*Figure 2* indicates the overall objective of a strategic focus to research development underpinned by 5 supportive objectives, namely Quality Assurance, Equity, Financial Sustainability, Effective Support Systems and an Output Dimension. These objectives are aligned with the University’s overall strategic objectives.

The strategies identified to achieve each of these objectives, are attached in Annexure A, and are available under separate cover.
Figure 2  Visual perspective of the research objectives

DEVELOP A RESEARCH CULTURE THROUGH A STRATEGIC FOCUS TO RESEARCH DEVELOPMENT

Ensure synergistic research policy directives, effective strategies and a strategic understanding of the research environment, with a personnel corps who understand and accept critical changes and new approaches in the university environment (both nationally and internationally)

- QUALITY ASSURANCE
  - Ensure an internationally competitive research system through high quality researchers and effective and quality post-graduate training

- EQUITY
  - Development of the research capacity of priority groups

- FINANCIAL SUSTAINABILITY
  - Effectively increase income from external sources by projecting an image of a research-orientated university

- SUPPORT SYSTEMS
  - Ensure user-friendly and effective systems that facilitate and support research at the University

- OUTPUT DIMENSION
  - Stimulate research and increase research outputs by using internal funds effectively

Cultivate loyalty and enthusiasm for research through the recognition of progress and achievement at all levels
3.1 OBJECTIVES FOR RESEARCH

OBJECTIVE 1: DEVELOP A RESEARCH CULTURE THROUGH A STRATEGIC FOCUS TO RESEARCH DEVELOPMENT

Ensure synergistic research policy directives, effective strategies and a strategic understanding of the research environment, requiring a personnel corps who understand and accept critical changes and new approaches in the university environment (both nationally and internationally)

**Background information:** The article *Striking a balance between becoming entrepreneurial in nurturing the academic heartland and transforming a higher education institution* (Frederick Fourie and Magda Fourie, UFS), supported by a number of other publications, provide excellent expositions of the most important global and national tendencies and forces in the higher education sector on a worldwide basis, as well as in South Africa and at the University of the Free State. Numerous policy documents, for example the White Paper on Science and Technology, the National Plan for Higher Education (2002), the National Research and Development Strategy (2002), strategic plans for, respectively, integrated sustainable rural development, agriculture, biotechnology and integrated manufacturing, as well as numerous other important policy documents, hold critical implications for South African universities. The vision of the leadership corps and the concomitant policy directives and priorities could easily fall out of step with the policy and strategies promoting research. It is important to continually ensure that this does not happen. Despite good mechanisms for research, there may be factors within the University that discourage research and prevent researchers from availing themselves of the incentives. The research environment must be understood at a strategic level, in order to ensure that strategies and action plans will be effective. Comparisons with approaches followed at other universities (both local and international) should inform subsequent decisions.

Apart from the focus on basic, strategic and applied research, the University strives to:

- Support needs-based Community Service research, aimed at development and problem solving;
- Promote interdisciplinary, intersectoral, holistic Community Service research with partners;
- Promote programme evaluation and impact studies regarding Community Service initiatives;
- Manage Community Service orientated contract research according to an appropriate incentive system;
- Investigate an appropriate incentive system to promote Community Service research.

Progress in research is often handicapped by a lack of understanding for, or support by, staff, when global or national tendencies bring about changes to concepts, policy directives or mechanisms at the University. Typical examples are new university foci, such as the concept of a third funding stream, new government policy which influences research, or new research paradigms such as the concept of multi-disciplinary co-operation, for example between human and natural scientists. Ownership, or at least understanding, of these movements in the sector and in the University must be cultivated amongst staff as far as possible. With the consideration or implementation of any important new concept, a great deal of effort should therefore be made in order to inform staff and to find mechanisms in order to bring about acceptance of such concepts.

This will lead to research “habit”, and a culture of research at the University.
<table>
<thead>
<tr>
<th>Strategies</th>
<th>Role-players</th>
<th>Priority</th>
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</thead>
<tbody>
<tr>
<td>1. Monitor external and internal environmental factors and assumptions, as well as policy directives and policy-making which may influence research at the UFS.</td>
<td>DRD</td>
<td>H, C</td>
</tr>
<tr>
<td>2. Launch studies to gain an understanding of the research environment, for example, obstacles and disincentives with regard to research, lack of time, requirements for development of infrastructure.</td>
<td>DRD</td>
<td>H, C</td>
</tr>
<tr>
<td>3. Launch a study of current policy-making in order to determine the degree of synergy with research policy and strategies.</td>
<td>DRD</td>
<td>H, C</td>
</tr>
<tr>
<td>4. Bring problematic areas to the attention of the leadership of the University (EM, EXCO, Deans).</td>
<td>DRD</td>
<td>H, C</td>
</tr>
<tr>
<td>5. Develop policy directives and strategies to strengthen research, in collaboration with other role-players.</td>
<td>DRD</td>
<td>H, C</td>
</tr>
<tr>
<td>6. Ensure strategic information systems which supply information for policy renewal.</td>
<td>DRD</td>
<td>H, C</td>
</tr>
<tr>
<td>7. Monitor and evaluate results of these actions.</td>
<td>DRD</td>
<td>H, C</td>
</tr>
<tr>
<td>8. Stimulate opportunities for extensive discussion of important issues to cultivate a greater inclination for constructive questioning and critical debate at the University.</td>
<td>Deans</td>
<td>M</td>
</tr>
<tr>
<td>9. Arrange a sufficient number of high-quality information sessions and courses when new concepts are being implemented at the University.</td>
<td>Deans</td>
<td>M</td>
</tr>
<tr>
<td>10. Ensure a culture of sympathetic leadership and support by the concerned University authorities during the implementation of new policy directives and critical initiatives.</td>
<td>Deans, DRD</td>
<td>M</td>
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</tbody>
</table>

Res Coms = (Faculty) Research Committees  
DR = Director: Research  
DRD = Directorate: Research Development  
DEC = Directorate: Entrepreneurship and Commercialization (see later)  
CDCS = Chief Director: Community Service  
CSC = Community Service Committees  

H = High  
M = Medium  
L = Low  
C = Continual
OBJECTIVE 2: QUALITY ASSURANCE
Ensure an internationally competitive research system through high quality researchers and effective and quality post-graduate training

Background information: Current national incentives for research could easily lead to a watering down of the quality of research and graduate training, in the pursuit of increased research outputs. A culture of good-quality research and post-graduate training can only be cultivated if the University:
- nurtures a core group of research leaders, who can serve as mentors and role-models for others, and for the following generations of researchers; and who can muster teams with critical mass
- emphasise the critical importance of the quality of post graduate student training, incl. standards or requirements for study guidance, in order to generate more research outputs from the work of post-graduate students (refer to the post graduate study guide prepared by the proposed Unit for Post Graduate Supervision)
- is able to effectuate exposure to high-level expertise through the promotion of co-operation with local and international experts in critical areas to be internationally competitive. This will be implemented within the framework discussed in a document for the “Development of an effective support service with respect to internationalization at the University”.

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Role-players</th>
<th>Priority</th>
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<tbody>
<tr>
<td>1. Ensure the application of appropriate policy and guidelines for tutors in faculties, and create creditable mechanisms for the handling of problems.</td>
<td>DRD Res Coms Target groups</td>
<td>H</td>
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<tr>
<td>2. Create a culture of good study guidance and mentorship, with suitable training and incentives.</td>
<td>DRD Res Coms Target groups</td>
<td>H</td>
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<tr>
<td>3. Ensure that study guidance is carried out only by proven researchers with a track record of research outputs.</td>
<td>DRD Res Coms Target groups</td>
<td>H</td>
</tr>
<tr>
<td>4. Put mechanisms in place to increase outputs from post-graduate students.</td>
<td>DRD Res Coms Target groups</td>
<td>H</td>
</tr>
<tr>
<td>5. Create opportunities for the exposure of students to high-level expertise as part of the stimulation of a culture of research at the University.</td>
<td>DRD Res Coms Target groups</td>
<td>H</td>
</tr>
<tr>
<td>6. Monitor and evaluate results and make adjustments where necessary</td>
<td>DRD</td>
<td>H</td>
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</tbody>
</table>
7. Create and use mechanisms to attract exceptionally good research leaders or, in cases where such leaders are present within the University, strongly support and accord prominence to them (NRF-rated).

8. Identify, through consultation and study, meaningful focus areas within which multi-disciplinary teams or networks of excellence already exist at, or can be established at, the UFS, by, *inter alia*, making use of competitive advantages (e.g. community-directed research).

9. Establish mechanisms to expose researchers and post-graduate students to, and cause them to co-operate with, local and international high-level research expertise.

10. Develop or nurture research leaders who can handle multi-disciplinary teams or networks, and establish multi-disciplinary programmes.

11. Create a culture, within the University, of monitoring and evaluation for own development.

12. Launch a study to identify areas in respect of which international recognition would be desirable, and develop strategies to address the attainment of such recognition.

13. Develop strategies to provide opportunities to enable researchers to utilize equipment and facilities at national and international institutions.

14. Develop an infrastructure and equipment upgrade and repair plan for the University.

<table>
<thead>
<tr>
<th>Res Coms Target groups</th>
<th>Deans</th>
<th>DRD</th>
<th>CDCS</th>
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necessary.
OBJECTIVE 3: EQUITY
Development of the research capacity of priority groups

**Background information:** It is essential to place a special focus on specific groups at the University in order to develop their capacity for research. This includes inexperienced, and particularly researchers from designated groups (in cases where these persons are not experienced), as well as the managers who must promote research capacity-building in the faculties. The research corps in the University is relatively old, and there are few female and black researchers. As part of the overhead strategies, this situation will have to be addressed. University systems are often not empowering from the point of view of inexperienced researchers. Although funds are important, they do not comprise the only need. A nurturing environment; good mentors; co-operation with others; opportunities for training in writing, mobilisation of funds, entering into partnerships, management of research, etc.; opportunities for networking with each other and with other researchers; recognition of progress and achievement; and exposure to expertise of high standing, are just some of the most important ways in which capacity can be developed. Heads of Departments and leaders of research teams are often unaware of problematic areas and necessary information, and could improve in their management of University systems in order to develop research capacity.

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<tr>
<th>Strategies</th>
<th>Role-players</th>
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<tr>
<td>1. Ensure funding programmes in order to get research going, by all staff, including staff at satellite campuses</td>
<td>DRD Res Coms Target groups</td>
<td>H</td>
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<tr>
<td>2. Induce target groups and their managers to identify, and assume ownership of, strategies.</td>
<td>DRD Res Coms Target groups</td>
<td>H</td>
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<tr>
<td>3. Arrange opportunities for networking and exposure.</td>
<td>DRD Res Coms Target groups</td>
<td>H</td>
</tr>
<tr>
<td>4. Arrange training opportunities.</td>
<td>DRD Res Coms Target groups</td>
<td>H</td>
</tr>
<tr>
<td>5. Facilitate mentorships and co-operation opportunities and mobilise funds for such opportunities [refer to the University Research Development Programme (URDP) at the NRF]</td>
<td>DRD Res Coms Target groups</td>
<td>H</td>
</tr>
</tbody>
</table>
6. Identify the needs of managers and develop appropriate strategies.

7. Stimulate a research culture in faculties and departments through regular seminars, discussions, debates, etc.

8. Monitor and evaluate results and make adjustments where necessary.
OBJECTIVE 4: FINANCIAL SUSTAINABILITY
Effectively increase income from external sources by projecting an image of a research-orientated university

Background information: The UFS has not yet succeeded in successfully exploiting all possible external sources of income. This may be as a result of research achievements that are rarely mentioned, and the fact that the UFS does not project an image, either to the outside or internally, of a research-oriented university. Of exceptional importance are the third-funding-stream possibilities, which should receive a much stronger focus as an integral part of university strategies, as well as income from international sources. Although there is still much room for improvement, there are already a number of research achievements and activities that could be highlighted during marketing occasions.

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<tr>
<th>Strategies</th>
<th>Role-players</th>
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<tbody>
<tr>
<td>1. Collect information on research activities and achievements at the University and supply it regularly and systematically to diverse internal and external sources.</td>
<td>Strat. Com Marketing Deans DRD</td>
<td>H</td>
</tr>
<tr>
<td>2. Arrange opportunities during which research at the UFS can be highlighted.</td>
<td>Strat. Com Marketing Deans DRD</td>
<td>H</td>
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<tr>
<td>3. Be the host to organisations, for example professional associations, which can propagate the research image of the UFS,</td>
<td>Strat. Com Marketing Deans DRD</td>
<td>H</td>
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<tr>
<td>4. Contribute to strategic marketing publications and focus on research in University publications.</td>
<td>Strat. Com Marketing Deans DRD</td>
<td>H</td>
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<tr>
<td>5. Put mechanisms in place to make use of a variety of local and foreign &quot;grantmaking organisations&quot; (e.g. the NIH, the EU, local and foreign foundations).</td>
<td>DRD Marketing</td>
<td>H</td>
</tr>
<tr>
<td>6. Bring in expertise in order to assist researchers with the understanding of principles and the writing of research proposals.</td>
<td>DRD</td>
<td>H</td>
</tr>
<tr>
<td>7. Exploit the potential of third-funding-stream income by placing a much greater emphasis on meaningful policy directives and effective implementation of contractual research, management of intellectual capital (rather than of intellectual property) and commercialisation of innovative research.</td>
<td>DEC DRD</td>
<td>H</td>
</tr>
</tbody>
</table>
8. Develop a strategic focus on community directed research in order to effectually utilise sources for development.

9. Develop internal and foreign partnerships and strategic alliances to improve research income.

10. Increase the number of local and international postgraduate students (with the focus on research), *inter alia* through the mobilisation of bursaries and the allocation of assistantships.

11. Monitor and evaluate the impact of these strategies.

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<tr>
<td>CDCS, CSC DRD Res Coms</td>
<td>H</td>
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<tr>
<td>DRD Marketing</td>
<td>H</td>
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<tr>
<td>DRD Faculties Marketing</td>
<td>H</td>
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<tr>
<td>DRD</td>
<td>C</td>
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</table>
### OBJECTIVE 5.1: SUPPORT SYSTEMS
Ensure user-friendly and effective systems that facilitate and support research at the University

**Background information:** Academic staff is often discouraged by the bureaucracy of the University and the time it takes to make use of administrative University systems.

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<tr>
<th>Strategies</th>
<th>Role-players</th>
<th>Priority</th>
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<tbody>
<tr>
<td>1. Investigate the systems that must support research and apply improvements where possible, including information services and technology.</td>
<td>DRD Res Com</td>
<td>H</td>
</tr>
<tr>
<td>2. Motivate and train staff to create user-friendly systems and effective service, and to accept ownership thereof.</td>
<td>DRD Res Com</td>
<td>H</td>
</tr>
<tr>
<td>3. Monitor the systems periodically in order to create a culture of improvement.</td>
<td>DRD Res Com</td>
<td>H</td>
</tr>
<tr>
<td>4. Investigate the possibility of appointing a Contract Manager and to establish an Intellectual Property Office.</td>
<td>DRD Vice Rector</td>
<td>H</td>
</tr>
</tbody>
</table>

### OBJECTIVE 5.2: SUPPORT SYSTEMS
Cultivate loyalty and enthusiasm for research through the recognition of progress and achievement at all levels

**Background information:** Financial recognition of research progress and achievements is important, as a part of the strategies to nurture and motivate researchers, but there are also other ways to effectuate this. The University of the Free State Research Turn Around Strategy implemented during 2002, is one such example.

<table>
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<tr>
<th>Strategies</th>
<th>Role-players</th>
<th>Priority</th>
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<tbody>
<tr>
<td>1. Ensure that the guidelines for, and implementation of, promotion and performance evaluation are strongly focused on research performance.</td>
<td>DRD Deans</td>
<td>H</td>
</tr>
<tr>
<td>2. Create formal opportunities within the University for recognition, by the top management and peers, of research achievements.</td>
<td>DRD Deans</td>
<td>H</td>
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<td></td>
<td>Human Resources</td>
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<tr>
<td>3. Highlight research achievements on a continual basis in University publications and marketing activities.</td>
<td>DRD Deans</td>
<td>H</td>
</tr>
<tr>
<td></td>
<td>Marketing</td>
<td></td>
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</tbody>
</table>
4. Investigate the system of research fringe benefits, i.e. sabatical leave. Compare with systems at other Universities and revise where appropriate.

5. Investigate system of financial incentives at other Universities for implementation at UFS.

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<th>Human Resources DRD</th>
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<td>Human Resources DRD</td>
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</table>
**OBJECTIVE 6: OUTPUT DIMENSION**
Stimulate research and increase research outputs by using internal funds effectively

**Background information:** The University’s turn around strategy for research already addresses this objective to a large degree. However, it is necessary to ensure that researchers make active and effective use of these funds. The result of this programme must also be constantly monitored and adjustments must be made where necessary.

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Role-players</th>
<th>Priorities</th>
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</thead>
<tbody>
<tr>
<td>1. Ensure effective mechanisms for the use of the financial incentives to increase research outputs.</td>
<td>DRD Res Coms</td>
<td>H</td>
</tr>
<tr>
<td>2. Ensure effective mechanisms for the allocation and utilisation of the special awards for young researchers, in particular, for local and international conference participation.</td>
<td>DRD Res Coms</td>
<td>H</td>
</tr>
<tr>
<td>3. Put mechanisms into operation in order to ensure that congress papers are converted into publications.</td>
<td>DRD Res Coms</td>
<td>H</td>
</tr>
<tr>
<td>4. Ensure effective mechanisms for the allocation and utilisation of funds. (Refer to the Turn Around Strategy)</td>
<td>UFS Res Coms</td>
<td>H</td>
</tr>
<tr>
<td>5. Ensure effective strategies in order to make time available for research or for the authoring of publications.</td>
<td>DRD Res Coms</td>
<td>H</td>
</tr>
<tr>
<td>6. Ensure effective mechanisms for the allocation and use of funds for urgent needs in respect of apparatus or information.</td>
<td>DRD Res Coms</td>
<td>H</td>
</tr>
<tr>
<td>7. Ensure effective mechanisms for the allocation and utilisation of funds for post-doctoral fellows, post-graduate bursaries and assistance.</td>
<td>DRD Res Coms</td>
<td>H</td>
</tr>
<tr>
<td>8. Ensure effective mechanisms for the effective allocation and utilisation of other possibilities for the generation of research outputs, including, <em>inter alia:</em></td>
<td>DRD Deans Res Coms</td>
<td>H</td>
</tr>
</tbody>
</table>

- The appointment of research fellows, e.g. experts from the private sector or retired researchers, to participate in research projects and deliver publications for subsidy credits.
- Visits by reputable foreign researchers to strengthen local exposure, expertise and capacity.
- The institution of a series of seminars with local and visiting researchers.
- The publication of technical reports.
- The creation of additional publication space in own
4. COMPLEMENTARY ELEMENTS OF THE SUPPORT SERVICE FOR RESEARCH DEVELOPMENT

In Sections 2 and 3 of this document, the objectives for research at the University of the Free State during the period 2003-2006 have been set out. The achievement of these objectives is dependent on the vision and co-operation of a whole range of role-players with different leaders. Within this environment, the Directorate: Research Development must determine its primary tasks and most urgent priorities.

A summary of the most important overall factors or elements that play a role herein, is given in Section 4.1.

4.1 Background Information

The following actions are recommended:

i) Revising of Internationalization

Refer to the discussion document: Internationalization at the University of the Free State: The Establishment of an Effective Support Service.
**ii) Upgrading and Professionalizing activities with respect to Entrepreneurship (and Commercialization)**

It is an essential and urgent matter that the milieu of the University, with regard to contractual research, intellectual property and commercialisation, should be systematised and that it should be structured and operated on a professional basis. This approach has become established at the most prominent universities in South Africa in recent years. Despite this, according to calculation, South Africa’s progress in this respect is 30 years behind that of the USA, 20 years behind that of Europe, and 10 to 15 years behind that of Australia.

The current systems at the UFS in this field needs attention, especially w.r.t
- critical signing powers that have been delegated without the relevant expertise being established in the necessary fields;
- a lack of integrated and effective policy-making and strategies;
- academics who are not sensitised to the importance of, and elements involved in, an effective focus hereon;
- handling and decision-making systems that are unable to move quickly enough in a business context; and
- staff who consequently do not make use of the University systems.

The University – including both the institution and the concerned academic staff – probably suffers enormous financial loss as a result hereof, if third-funding-stream activities are taken into account. Although the situation has improved recently, it is well known that as a result of deficient leadership and systems in these areas at universities, industry is subsidised by universities in South Africa, and academics in general sell their intellectual capital to other parties in exchange for very few benefits.

At the same time, it is clear that the mere establishment of structures to control these functions, and “clamping down” on staff, are not desirable. Ill-conceived intervention leads to extremely strong resistance among researchers, particularly if the benefit of the University’s involvement in these areas is not clear. This whole milieu must thus be approached very strategically and with extreme caution; a climate of support, added value and sufficient compensation of all concerned parties must be created by the applicable systems in order to make sure that researchers make use of them. At the same time, the University will need to derive financial and other benefits from the involvement of its staff in entrepreneurial activities. International and local strategies, as well as the new government policy on intellectual property developed from state funds, will also have to be taken into account.

Responsibility for the above must be accepted on a full-time basis at a high level within the University. It is thus proposed that the “Entrepreneuriese Klaringskomitee” pay attention to the above as a matter of urgency. Unbureaucratic administrative and decision-making systems will have to be
established as soon as possible, however, and a start will need to be made with the development of the best ways of approaching specific matters. Initially, a contract manager should be appointed within the Directorate for Research Development. It is also recommended that a study be commissioned to investigate the current contract and contract-funding environment at the University.

The proposed Directorate will have to display a special understanding for the interests of the researchers, as well as those of the University, and avoid following the course that is currently being taken by a number of other universities, and which alienates researchers. A great deal of training and sensitization will also have to be carried out in order to ensure that the staff and students understand this milieu. When the Directorate has become well-developed, it may be necessary to place contractual research, the management of intellectual property and other commercialization activities under the management of various persons, since each of these aspects requires a somewhat different kind of expertise. However, this should not be necessary within the next three to five years.

iii) Post-graduate bursaries and awards must be identified, and must be strategically managed and co-ordinated in a better way

The current arrangement concerning post-graduate bursaries at the University of the Free State appears to be extremely fragmented and, particularly with regard to post-graduate bursaries, there should be a greater amount of strategic management and co-ordination of the entire post-graduate research milieu. In order to maximally utilize awards allocated to post-doctoral associates, these can also be regarded and handled as bursaries. Mobilisation of bursaries and post-graduate awards from more diverse local and foreign sources, and the strategic allocation thereof on terms and conditions that reinforce the University’s focus on more and better research outputs and human resources for the national interest, should comprise a strategic focus. This approach differs from the mere routine administration of bursaries, and is essential in the light of the new subsidy formula that is based, *inter alia*, on the number of Master’s degree and doctoral students who are completing their studies as part of the research subsidy.

It could thus be considered more meaningful to shift the strategic mobilisation and management of post-graduate bursaries and awards to the Directorate: Research Development as part of a central focus on post-graduate development, while bursary administration can be co-ordinated centrally elsewhere. However, post-doctoral partners must be handled by the Directorate: Research Development, since they will always be research-oriented, and will mainly be persons from foreign countries.

iv) The Research Committee system must be revised in order to establish a conceptual and strategic approach to research

According to information, the University (central), as well as most of the faculty research committees function in an administrative capacity, with little emphasis on
strategy. The committees should serve as instruments for the conceptualization and strategic development of research.

4.2 The Overall Objective of the Directorate: Research Development

In collaboration with others, to create an environment at the University of the Free State in which:

- research can improve and flourish
- researchers and post-graduate students feel that they are valued
- the University’s profile is enhanced, both nationally and internationally.

4.3 Fundamental Principles Underlying the Establishment of the Directorate: Research Development

i) The Directorate will add sufficient value to research development to justify its existence, by helping to create an environment in which research outputs will increase and improve, and will enhance the profile of the University.

ii) It will support staff and post-graduate students by means of good service, and create a nurturing environment for quality and service delivery.

iii) It will be constantly focused on close co-operation between the academic and support services staff.

iv) It will continually, and as a first priority, promote a strategic approach to Research, but will also establish decision-making and administrative systems which will function effectively, with as little bureaucracy as possible.

v) It will promote a culture that will create good information management, regular monitoring, evaluation, the learning of lessons and follow-up – with a view to the improvement of decision-making and the support of Research at the UFS.

vi) It will not attempt to prescribe or control, but rather to establish a spirit of cooperation through the facilitation and co-ordination of activities, where appropriate, in order to achieve set objectives in close collaboration with Deans.

5. RESEARCH ACTION PLAN

Following the acceptance of this proposed research strategy, a detailed action plan, including role players, time frames, priorities and benchmarks, will be developed.

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