

# BLUE SKIES RESEARCH FUNDING INSTRUMENT (CONCEPT NOTE CALL)

**KNOWLEDGE FIELDS DEVELOPMENT** 

**Framework Document** 

March 2017

# **TABLE OF CONTENTS**

1 1.1 1.2	FUNDING INSTRUMENT TITLE AND DESCRIPTION Name Description of Funding Instrument
2	EXECUTIVE SUMMARY
3 3.1 3.2 3.3 3.4 3.5 3.6 3.7	STRATEGIC CONTEXT Environmental scan Objectives NRF Perspective Institutional structure Financing support Key stakeholders Information sources
4 4.1 4.2 4.3 4.4 4.5 4.6	MODUS OPERANDI Call for proposals Eligibility Rules of participation Timelines Management of Funding Instrument Line of authority
5 5.1 5.2 5.3 5.4 5.5	FINANCIALS Funding model Funding ranges Funding support Funding Instrument budget Financial control and reporting
6 6.1 6.2. 6.3 6.4	Monitoring and Evaluation of the Funding Instrument Reporting Timeframes for evaluation Broad terms of reference for the evaluation Utilisation of the results of the evaluation

#### 1 FUNDING INSTRUMENT AND DESCRIPTION

#### 1.1 Name

BLUE SKIES RESEARCH FUNDING INSTRUMENT

# 1.2 Description of Funding Instrument

In respect of this instrument Blue skies research is defined through five (5) perspectives:

- Defined from the *perspective of the researcher*, it refers to **self-initiated**, **curiosity-driven** research (i.e. seeking to explore knowledge beyond the horizon).
- Defined from the *perspective of a funding agency*, blue skies research funding implies a willingness to take calculated **investment risks**.
- Defined in terms of the object of research, it focuses on exploring important and/or new phenomena - rather than run-of-the-mill themes - as defined by peers in the specific research community.
- Defined from the perspective of the *research approach*, it is **novel**<sup>1</sup> in terms of one or more of the following components: theoretical framework, methodological approach or research context (for example, shifting paradigms or research technology innovation).
- Defined in terms of the contribution to the knowledge base, blue skies research is expected to
  push the frontiers of knowledge and possibly become a point of gravity for subsequent
  research.

Furthermore the Funding Instrument recognises that the epistemological, methodological and other differences between the respective science cultures (e.g. economic, medical, social, engineering and natural sciences) must be acknowledged and therefore the assessment process should take cognisance of this differentiation. However care should be taken to ensure that multidisciplinary, interdisciplinary or trans-disciplinary blue skies research is not stifled through this differentiation.

#### 2 EXECUTIVE SUMMARY

The Blue Skies Research Funding Instrument can be described as multi-dimensional self-initiated, curiosity-driven inquiry that necessitates high investment risks, addresses new phenomena, as well as pushes the frontiers of knowledge. Blue Skies-type or frontier research is associated with fundamental and basic research programmes.

The objectives of the Blue Skies Funding Instrument are:

- To provide space and time for research to push the frontiers of knowledge and to encourage imagination through scientific and scholarly endeavours;
- To support and sustain communities of critical and free thinkers;

<sup>&</sup>lt;sup>1</sup> Novel research is about leveraging existing ideas in new ways however the paradigms/boundaries/directions must shift (either completely or partially).

- To promote and encourage diversity<sup>2</sup> in research for re-imagining<sup>3</sup> disciplines or academies;
- To bring about new and unpredictable scientific / technological / scholarly discoveries / interpretations / understandings / knowledge.

The NRF is cognisant of the complexities of dealing with this multi-dimensional concept and has structured the instrument as follows:

- Call for Concept Notes (call to open on 3 April 2017)
- Fund successful Concept Notes for one year only to a maximum of R 200,000 each (applicants will be informed in October 2017) and commencing in 2018 for one calendar year;
- Invite promising Concept Note applicants to submit Full proposals (invitations will be made in February 2019)
- Fund successful full proposals for a three-year period (applicants will be informed in October 2019) to commence in 2020;
- Full proposals must address :
  - a. New phenomena
  - b. Push frontiers of knowledge
  - c. Multi-dimensionality, and show
  - d. Proof of concept (clear evidence of progress made <u>and</u> milestones achieved during the Concept Note funding phase).

See <u>Table 1</u> for specific details regarding the modus operandi of these processes and see <u>Figure 1</u> for a schematic representation of the application, assessment and funding processes.

#### 3 STRATEGIC CONTEXT

The National Research Foundation's (NRF) mandate is to support and promote research through funding, human resource development and the provision of the necessary research facilities in order to facilitate the creation of knowledge, and innovation and development in all fields of science and technology, including indigenous knowledge and thereby to contribute to the improvement of the quality of life of all the people of the Republic (NRF Act, 1998).

A review of the Focus Area Programme (FAP) that guided the NRF investments since 1998 was conducted in 2007. This review recognized that the rationale behind FAP and model underpinning it remained valid. The review also acknowledged that the focus area programme came at the right time, had been partially successful and that a focused research programme should be continued,

<sup>&</sup>lt;sup>2</sup> Diversity in research in this context refers to theoretical frameworks, approaches and methodologies.

<sup>&</sup>lt;sup>3</sup> To imagine again or anew especially: to form a new conception of (<u>Merriam-Webster Online Dictionary</u>. 2010. Merriam-Webster Online. 28 May 2010. <a href="http://www.merriam-webster.com/dictionary/reimagining">http://www.merriam-webster.com/dictionary/reimagining</a>

even if in an amended form. The review recommended the provision of a funding instrument dedicated to promoting discipline-oriented, self-initiated research. Hence, the Blue Skies Research Funding Instrument was initiated in 2008 to provide space for novel fundamental enquiry, curiosity-driven and basic research.

A two-staged process that was followed by the NRF to improve this instrument included:

- an open invitation to researchers in South Africa to input into the refinement of the instrument via an online questionnaire, and
- a workshop held on 16 March 2010 in Pretoria (taking into account the comments received from the above step) for invited participants to finalise the refined shape of the instrument.

#### 3.1 Environmental scan

The National Research Foundation's (NRF) purpose is to support and promote research through funding, human resource development and the provision of the necessary research facilities in order to facilitate the creation of knowledge, and innovation and development in all fields of science and technology, including indigenous knowledge and thereby to contribute to the improvement of the quality of life of all the people of the Republic (NRF Act, 1998). Soon after its founding in 1998, the NRF took a strategic decision to organise its support and promotion of research in terms of nationally relevant focus areas. These focus areas represented a significant attempt by the NRF to steer the research funding away from the traditional comfort zone of self-initiated research, important as that zone may have been throughout the history of science – until the late nineteen eighties. The focus area approach at this time was partially in line with the strategies of other comparable national funding agencies across the world. The review of the Focus Area Programme (FAP) in 2007 recommended the discontinuation of the FAP and introduction of new funding instruments to support and promote research. The Blue Skies Research funding instrument was one of the outcomes of the recommendation, aimed at providing an opportunity for curiosity driven basic research.

#### 3.2 Objectives

The objectives of the instrument are:

- To provide space and time for research to push the frontiers of knowledge and to encourage imagination through scientific and scholarly endeavours;
- To support and sustain communities of critical and free thinkers;
- To promote and encourage diversity<sup>4</sup> in research for re-imagining<sup>5</sup> disciplines or academies;

<sup>&</sup>lt;sup>4</sup> Diversity in research in this context refers to theoretical frameworks, approaches and methodologies.

<sup>&</sup>lt;sup>5</sup> To imagine again or anew especially: to form a new conception of (<u>Merriam-Webster Online Dictionary</u>. 2010. Merriam-Webster Online. 28 May 2010. <a href="http://www.merriam-webster.com/dictionary/reimagining">http://www.merriam-webster.com/dictionary/reimagining</a>

• To bring about new and unpredictable scientific / technological / scholarly discoveries / interpretations / understandings / knowledge.

#### 3.3 NRF Perspective

The Blue Skies Research Funding Instrument creates space to push the frontiers of knowledge, enable unpredictable discoveries as well as promote high impact research within disciplines. This was in line with the *NRF's Vision 2015* and the follow-on *Strategy 2020* which envisages the following for South Africa:

- World-class research
- Transformed society; and
- Sustainable environment

#### 3.4 Institutional structure

The funding instrument is managed by the Knowledge Fields Development (KFD) Directorate, the Reviews and Evaluation Directorate is responsible for the review processes up to the award of grants. The Grants Management and Systems Administration Directorate's responsibilities include disbursement of grant funds and ensuring adherence to the conditions of the grant.

# 3.5 Financing support

The Blue Skies Research Funding Instrument is made possible through the National Research Foundation's Core Funding.

## 3.6 Key stakeholders

Science Councils, Universities and Museums

#### 4 MODUS OPERANDI

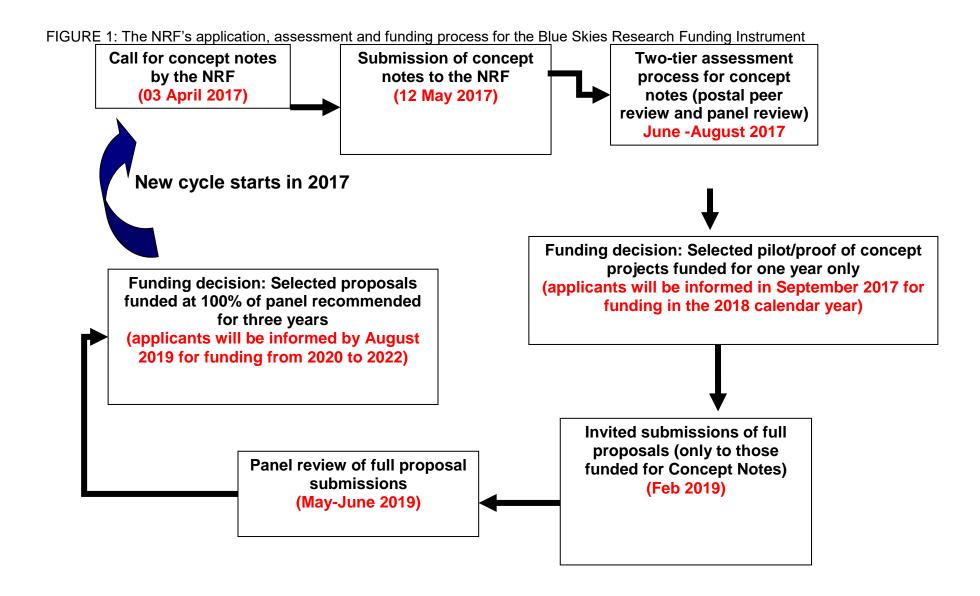
The Blue Skies Research Funding Instrument *modus operandi* are described in <u>Table 1</u> while the flow diagram, Figure 1, depicts the application, assessment and funding processes with appropriate timelines.

## 4.1 Call for proposals

A call for Blue Skies Research Funding Instrument proposals is made once a year. This call is for Concept Notes. All application materials **must** be submitted electronically via the NRF Online Submission system at <a href="https://nrfsubmission.nrf.ac.za">https://nrfsubmission.nrf.ac.za</a>

The NRF closing date for endorsed Concept Notes applications is 12 May 2017. All applications must be endorsed by the research office of the principal applicant before submission to the NRF. It is the responsibility of each applicant to familiarise him/herself with the <u>internal closing date</u>, set by their institution in order to meet the NRF closing date. Incomplete OR late submissions will not be accepted.

NB: At each phase (Concept note and Full proposal) of the Blue Skies Funding Instrument application process, applicants must ensure that their Curriculum Vitae are updated on the NRF Online Submission System at <a href="https://nrfsubmission.nrf.ac.za">https://nrfsubmission.nrf.ac.za</a>.



# 4.2 Eligibility

TABLE 1: Application, assessment and funding details for <u>concept notes</u> and <u>full proposal</u> submissions

	CONCEPT NOTES	FULL PROPOSALS
Who may apply	Only researchers based at NRF recognized research institutions in South Africa are eligible to apply as the principal investigator (PI).  Their affiliation must be either as:  • Full-time employees	Only researchers who have been funded in Year 1 of that cycle for pilot/proof of concept projects will be invited by the NRF to submit full proposals submissions.
	<ul> <li>Part-time employees on contract but on condition that the appointment is for (at least) the duration of the project applied for in the submission. The length of the contract should be stated in the application form. Salaries must be paid by the research institution and the primary employment of the individual concerned must be at that institution. A contract researcher appointed at a university or university of technology on behalf of a third party to fulfil a very specific function for the latter does not qualify for support.</li> <li>Retired researchers provided that:</li> </ul>	
	<ul> <li>there is proof of institutional support in the form of an employment contract, office space, administrative support, access to research equipment and space. The institution will have to ensure that a minimum of six months are spent at the facility for the purpose of research and research capacity development.</li> <li>the researcher must have a research publication track record and must be actively supervising postgraduate students at present.</li> </ul>	

	CONCEPT NOTES	FULL PROPOSALS
Assessment Process	A two tiered peer- review assessment process will be followed, which includes:	The assessment process will include:
	Postal/Remote-peer review: The postal/remote-peer reviewers will be specialist in the ambit of the respective proposals.  Panel-peer review: Panels will be broadly constituted based (i.e. Social Science, Humanities, Law, Fine Arts, Engineering and	Panel-peer review: One panel will be constituted to assess all the full proposal submissions. This panel will comprise of members with reputable research standing who represent different broad spectrum knowledge fields
	Natural Sciences (Physical Sciences, Life Sciences, Biological Sciences etc). These areas may be merged or further disaggregated as appropriate depending on the submission demands.	
	At least one panel will be constituted for multi/inter/trans-disciplinary research (if required).	
	Panel members will be selected based on their broad overview of the respective knowledge field and their research standing.	

# Assessment criteria

Postal/remote-peer reviewers will provide qualitative comments on the concept notes in terms of whether the research concept proposes to address:

- Important and/or new phenomena as defined by peers in the specific research community.
- Novel approaches in terms of the theoretical framework(s), methodological approach (es) or research contexts.
- The extent to which, the research proposes to push the frontiers of knowledge production.

The panel-peer reviewers will:

- Moderate the postal/remote-peer review reports and grade each concept note as per the same assessment criteria employed for the postal-peer review process.
- Assess the track record of the applicant and team members (if relevant) in terms of the capacity to undertake the proposed research.
- Advise the NRF on the appropriateness of the budget request.
- (see <u>APPENDIX 1</u> for scorecard details).

- The panel-peer reviewers will assess the full proposal submissions in terms of its:
  - Feasibility: This will be based on the progress made to date (Year 1)
  - Proposed approaches and activities planned for the research project
  - Availability of required resources.
  - Envisaged contributions to human resource capacity development (including, issues of equity and redress).
- The panel will also advise the NRF on the appropriateness of the budget request.

Proposal grading	Assessment Criterion is graded on a scale as follows:  Scoring scale to be used				
grading	Score Scale to	Meaning of score	Notes		
I	4	Excellent	It is clear that the achievement could no	ot be improved within the specific context.	
	3	Above average	The achievement is exceeding average but could still be improved within the specific context.		
	2	Average	This is an average achievement within the appropriate context.		
	1	Below average	The achievement is not meeting average expectations within the appropriate context however this could be improved with minor amendments/revisions.		
	0 Context	Poor	There are major shortcomings or flaws	in the submission.	
Where to apply	If the criterion is need application we application sy 03 April 2017. All	the criterion is not applicable to an application, the weighting of the criterion will equal zero. The score of each criterio ach application will be contextualised to accommodate variability in knowledge fields, institutional capacity etc. The application system for Concept Note submissions will open on the 3 April 2017. All applications must be submitted via the NRF submission system at https://nrfsubmission.nrf.ac.za.			
	Incomplete and la	te submissions will n	ot be accepted.		
Closing dates	The closing date for Blue Skies Concept Notes is also 12 May 2017.				
Required documentation		dand validated applic	pe submitted online at <a href="https://nrfsubmication">https://nrfsubmication</a> form	ission.nrf.ac.za	

	<ul> <li>Uploaded letters from co-investigators confirming their participation in the proposed research, if relevant</li> <li>Any additional supporting documents</li> </ul>
Funding decision process	The NRF's funding decisions are informed by the review panels' accumulative weighted score of each assessed application.  Only applications scoring accumulative scores of "3" and above across all panels will be considered for funding by the NRF. The NRF will fund the top-scoring applications across all panels within the instrument available budget.
Feedback	In principle, feedback on the assessment of the application is regarded as a crucial value-adding function of the NRF. In a limited number of cases, parts of feedback from either the reviewers and/or panel members who evaluated your application will be sent. These selected comments will be provided to give insight into some of the peer thinking that informed the grant decision-making process, and to give constructive support to applicants. Reviewers' names will not be given with the feed back, In general, no feedback will be sent where the assessment was positive unless specific conditions are attached to the funding.

# 4.3 Rules of participation

Only researchers based at NRF recognized research institutions in South Africa are eligible to apply as a principal investigator.

For both the Concept Notes and Full Proposal applications, phases of the Blue Skies Research Funding Instrument, the core research team consists of a principal investigator and as appropriate co-investigator(s). In addition, the **PRINCIPAL INVESTIGATOR** (i.e the applicant) must be an active researcher who takes intellectual responsibility for the project, its conception, any strategic decisions called for in its pursuit, and the communication of results. The principal investigator must have the capacity to make a serious commitment to the project and cannot assume the role of a supplier of resources for work that will largely be placed in the hands of others. S/he will take responsibility for the management and administration of resources allocated to the application.

A <u>CO-INVESTIGATOR</u> is an active researcher who provides significant commitment, intellectual input, relevant expertise into the design and implementation of the research application. S/he will be involved in all or at least some well-defined research activities within the scope of the application. South African-based co-investigators are eligible to receive NRF funds from the grant if the team's application is successful.

Post-doctoral fellows, students, technical and support staff should NOT be listed as co-investigators.

The project may also include:

#### RESEARCH ASSOCIATES/COLLABORATORS

These are individuals or groups who are anticipated to make relatively small but meaningful contribution to the research endeavours outlined in the application. Research Associates/collaborators will not actively participate in the design and implementation of the research application. They are not considered a part of the core research team.

#### 4.4 Timelines

Blue Skies Research Funding Instrument Concept Note grants will be awarded for a period of one year, while the Full proposal will be for up to three years. Successful applicants who wish to apply for further funding upon completion of a three-year funding cycle must submit new applications. All applications will be assessed on a competitive basis. The Blue Skies Research funding cannot be automatically renewed. Preferential treatment will not be given to those who have previously received NRF funding.

# 4.5 Management of funding instrument

The KFD Directorate of the NRF – Research and Innovation Support and Advancement (RISA) manages the Blue Skies Funding Instrument and is primarily responsible for:

- Strategic oversight and management of the funding instrument;
- Conceptualizing and developing the funding instrument;

- Coordinating and facilitating activities of the funding instrument;
- Compiling funding instrument research and evaluation reports;
- Stakeholder engagement;
- Ensuring that the funding instruments delivers on its intended goal(s).
- Awarding of grants

The Reviews and Evaluation Directorate is responsible for managing the adjudication process including:

- Sourcing of reviewers both for remote reviews and panels;
- Managing the peer review process;
- Organizing and managing the review panels as and where appropriate;
- Providing feed-back as appropriate and
- Recommending grant awards

The GMSA Directorate is responsible for

- Managing the call process, that is,
  - Posting the call;
  - Receiving and assessing applications eligibility;
- Coordinating and facilitating the granting processes
- Managing the granting including the administration of awards;
- Administering grant payments; and
- Ensuring adherence to conditions of grants

## 4.6 Lines of authority

The funding instrument Director, in the KFD Directorate generally manages the Blue Skies Research Funding Instrument with the assistance of a Professional Officer. Where and when appropriate, a call may be managed by a specially appointed Project Leader supported by Project team of staff drawn from Reviews and Evaluation, GMSA; Knowledge Management and others. The Director responsible for this instrument reports to the Executive Director of the KFD Directorate. Directors from GMSA and Reviews and Evaluation will normally manage the granting and review processes, respectively with the assistance of Professional and Liaison Officers. The Directors in both the GMSA and the Reviews and Evaluation report to their respective Executive Directors

# 5 FINANCIALS

# 5.1 Funding model

The Blue Skies Funding Instrument is made possible through the Core Funding model of the National Research Foundation.

#### 5.2 Funding ranges

A maximum budget of R 200,000 (Two hundred Thousands Rands) per Concept Note applications will be considered. Concept Note funding will not normally be extended beyond one year. Applicant must provide a detailed, high-level operational budget with motivations. In view of the fact that Concept Note funding only runs for one year, no grant-holder linked bursaries are allowed.

Successful Concept Notes will receive funding that accommodates the following budget items research-related operating costs

- Materials and Supplies
- oTravel and subsistence
- oResearch / Technical / Ad hoc Assistants
- Small Research Equipment

# 5.3 Funding support

The NRF funds the Blue Skies Research on an ongoing basis. Science councils, universities, museums and other NRF-recognized institutions are the primary beneficiaries of this funding instrument.

# 5.4 Funding Instrument budget

The budget for this instrument originates from the NRF's Core Funding.

#### 6. MONITORING AND EVALUATION OF THE PROGRAMME

The National Research Foundation is responsible for monitoring and evaluating the Blue Skies Research Funding Instrument. Since its inception in 2008, the Blue Skies Research Funding Instrument has been once in 2010, following extensive consultation with the research community. Recommended revisions were incorporated in the new version of the funding instrument.

# 6.1 Reporting

The KFD Director is responsible for reporting quarterly and annually on the contribution of the Blue Skies Funding Instrument to the Knowledge Fields Development Directorate's Key Performance Indicators. In addition, the Director is responsible for reviewing progress and reporting two quarterly on the Blue Skies Research Funding Instrument.

#### 6.2. Timeframes for evaluation

The Blue Skies Research Funding Instrument will be evaluated every seven to ten years as seen fit by RISA, and a team of reviewers will be appointed by the National Research Foundation. The NRFs' Knowledge Fields Directorate in consultation with the Review and Evaluation Directorate will agree to and set Timeframes for the review in line with the existing guidelines.

#### 6.3 Broad terms of reference for evaluation

The broad terms of reference for the evaluation of the Blue Skies Funding Instrument will be determined by the Knowledge Fields Development with the approval of RISA prior to the evaluation taking place and in accordance with the tenets set in the NRF's Review and Evaluation Directorate's Guidelines.

#### 6.4 Utilisation of the results of the evaluation

The results of the evaluation will be used in line with the purpose set in the Terms of Reference for the evaluation as well as for instrument improvement and development.

REFER QUERIES TO			
Application process related	Framework Strategic related :		
Professional Officer:	Director		
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# LIST OF ACRONYMS

- 1. APRs- Annual Progress Report
- 2. CV- Curriculum Vitae
- 3. FAP- Focus Areas Programme
- 4. GMSA- Grant Management Systems Administration
- 5. KFD- Knowledge Fields Development
- 6. NRF- National Research Foundation
- 7. SKFG-Strategic Knowledge Fields Grants
- 8. RISA-Research and Innovation Support and Advancement

		Blue Skies Research Funding Instrument			
Criteria	Sub-Criteria	Details	Score / 4	Weight (Total = 100%)	Weighted score (Total = 4)
Quality of the "Concept Note"	The "Object" of the research	<ul> <li>How important and/or new - as defined by peers in the specific research community- are the phenomena being investigated?</li> </ul>		20%	
	Research approach	<ul> <li>Are novel approaches in terms of the theoretical framework(s), methodological approach(es) or research contexts being explored?</li> </ul>		20%	
	Contribution to the knowledge base	<ul> <li>Will the proposed research push the frontiers of knowledge production?</li> </ul>		30%	
Equity & redress	Of applicant	Race/Gender		10%	
Track record of applicant	Past research	<ul> <li>What is the applicant's output in terms of publications, patents, designs, performances etc?</li> </ul>		10%	
	Students trained	What has the applicant's contribution been in terms of training M and D students? This includes the training of black and/or females students.		10%	
	100%	0.00		100%	