

# DST DIRECTED RISK RESEARCH FUNDING POLICY (DRAFT<sup>1</sup>)

*Version: 8*

*Date: May 2017*

## Introduction

The policy is a living document, and will be updated from time to time to include decisions taken by the Committee.

## Summary of changes with respect to previous version

The following clauses have been modified:

- The process diagram on the next page has been updated
- Clause 23 has been added clarifying the one-to-many relationship in the Problem Statement -> Research Proposal -> Article chain
- Clause 25 has been added on a “Closing-the-Loop” bonus for articles that result directly from problem statements
- Clause 37 has been added regarding the acknowledgement of DST funding, when/if applicable
- Clause 38 has been added on the acknowledgement required for an article to be considered for a “Closing-the-Loop” bonus

## Purpose and Scope of Policy

The purpose of this policy is to provide and document guiding principles to the Directed Risk Research Steering Committee (SteerCo). The policy is applicable to all basic and directed risk research activities undertaken by the NWU and in terms of the 2012 Absa-DST MoU, which has provided funding to the NWU’s Centre for BMI for the establishment and support of a risk research capability. The total value of the contract is R8.889m, spread as follows over the contract term: 2012/13: R1.6m; 2013/14: R1.7m; 2014/15: R1.8m; 2015/16: R1.89m; 2016/17: R1.899m.

## Context

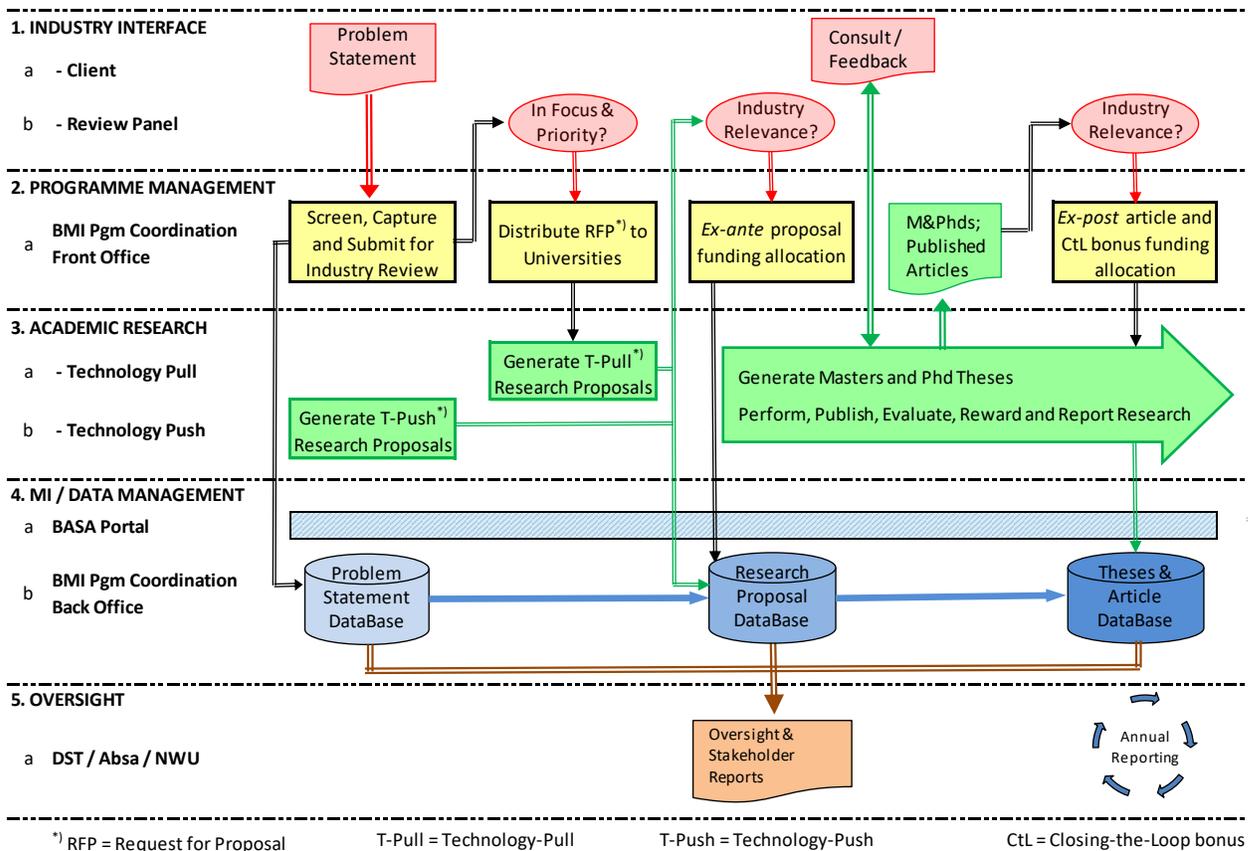
In order to provide context, the risk directed risk research process is presented in the following diagram, and consists of a continuous interplay between the main stakeholders:

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<sup>1</sup> **This policy has not been approved by the SteerCo and also needs to be checked from a legal perspective**

- The DST, as the funder of the initiative and ultimately the owner of the credit for having initiated this process for the improvement of the national SET levels
- The Risk industry, which features in two roles: Firstly via providing industry problems that could serve as research themes, an secondly as evaluators of the industry relevance of the research proposals and published articles
- The Universities, by performing and publishing the research, by either conducting self-generated technology-push research projects or in response to the industry-supplied problem statements.
- The Program Office, provided by the NWU Centre for BMI, which manages the interface between the different layers and the drive to move the process forward.

**DST Directed Risk Research Process Diagram**



The structure of the policy consists of sequentially numbered paragraphs for ease of reference, grouped under applicable headings.

### **General**

1. The **Risk Research Steering Committee** (SteerCo) will comprise of the DST Chief Director allocated to the DST-Absa MoU, the Absa Head of the Centre for BMI and the Director of the Centre for BMI.
2. A **Review Committee** (RevCo) of industry experts will be appointed by the Director of the Centre (in consultation with the Head of the Centre) on an ad hoc basis to assist with the evaluation of risk proposals.
3. All basic and directed research projects should yield research results in the form of published articles or postgraduate Masters and PhD theses that will in the long term support the Absa Applied Research Programme (AARP).
4. The intention with the research should be to establish the necessary risk research know-how and capacity in order to support the AARP and the financial services industry in general.
5. There is a mutual responsibility on all the roll players to communicate to ensure that the stated targets are achieved.

### **Confidentiality**

6. Non-confidentiality of DST research projects: Since the purpose of the programme is to conduct basic and directed research with the primary aim of publishing research in open journals, confidentiality of research is not applicable unless determined upfront between the parties involved.
7. Client-confidential projects: It may happen that a university is busy with a company-confidential research project for a client that they wish to include in the DST research program. In such a case it would be required that they confirm with the client that the Problem Statement will be available for all the universities to tender for via a Research

Proposal, and that any resulting article will be in the open literature, as per the previous clause.

### **Intellectual property**

8. In terms of the Agreement (clause 9.1), the University who conducted the research will be the owner of all intellectual property with regard to all patents, models, expertise, copyright, know-how and trademarks on the research projects that might arise from the risk research programme of the Centre as funded by the DST. Note that in case of collaboration between parties from different institutions, intellectual property will be negotiated by the parties involved.
9. In terms of the National Intellectual Property Rights from Publicly Financed Research and Development Act No. 51 of 2008 (promulgated on 02 August 2010), the relevant University will be the owner of all intellectual property with regard to all patents, models, expertise, copyright, know-how and trademarks on the research projects (“Intellectual Property”) that may arise from the basic and directed risk research programme funded by the DST.

### **Principles for differentiation between basic and directed research**

10. All work will be classified as research – the work will typically not be subject to urgent deadlines.
11. Basic research is driven by researchers in a technology-push fashion. Researchers work on the projects that match their own skills the best and the main aim is on publications in open sources, especially in international journals. Basic research typically has a long term focus and focuses on capacity building, for example the delivery of PhD and MSc theses.
12. Directed research is driven by industry requirements in a technology-pull fashion. Researchers work on trans-disciplinary projects that are important to industry. The publications resulting from these projects will typically have multiple authors representing academia and industry collaborators. Although the main aim stays on the

publication of papers in open sources, directed research projects will have a short term focus and will concentrate on the dissemination of knowledge in local journals.

13. There are certain types of work that will be difficult to classify uniquely. Such cases will be classified based on the merits of each individual case.

#### **Oversight / Management and contracting process**

14. The management strategy that will be employed to achieve the objectives of the initiative has the publishing of articles in reputable academic journals in the field as its core goal. From this a two-pronged approach will be followed – the first by using part of the funds to reward authors for published articles on an *ex-post* basis with the balance going to research proposals on an *ex-ante* basis. The allocation will initially be dominated by the *ex-post* allocations but the strategy will be to systematically change the balance so as to start influencing the research foci at the universities to become in line with industry requirements. The final output of these initiatives (when published) will then again be evaluated in an *ex-post* manner.
15. In parallel to the strategy mentioned in the previous paragraph, funding will also be allocated to deserving Masters and PhD dissertations, aimed at encouraging the research from the proverbial grass-root level.
16. Research projects life cycle: Typically, directed research projects will go through a life cycle consisting of a
  - problem statement (PS)
  - research proposal (RP)
  - a published article (if applicable)

Problem statements will be sourced from industry and hosted on an open platform to which all researchers have access and to which they can respond by compiling proposals on how they plan to tackle the problem. Researchers may also submit proposals on a technology-push basis. The proposals will be considered for funding by the RevCo and if successful, will receive a nominal up-front amount as incentive (*ex-ante funding*). Once the resultant article is published, it will be eligible for funding again, but then as part of the backward-looking process (*ex-post funding*). One

problem statement may give rise to one or more proposals (from one or more universities), each of which may in turn result in one or more articles.

17. Extracting Problems Statements from articles: It could also happen that researchers are busy producing an article which they believe would have emanated from an industry problem had industry been aware of it when the research was started. In such a case it will be acceptable for the research team to extract a problem statement from the article, find an industry problem owner for it and submit a Research Proposal that will be considered for funding, **provided** that the article has not yet been accepted for publication by a journal.
18. Multi-year projects: By its nature, some of the research projects will be multi-year, with the work flowing from one year to the next. From a management process and in line with the DST's annual budget cycle, projects are also managed on an annual basis, without any automatic year-end carry-over of funds or work. Any proposal will only be eligible for funding only once.
19. Roll-over Problem Statements: Problem Statements will retain their original numbers when the research team continues work on it in the new year. Such problem statements will have to be reconfirmed with the industry problem owner regarding its relevance. Should there be material changes in the requirements, a new Problem Statement should be generated with a new number in the current year.

### **Funding allocation process**

20. The SteerCo is responsible for the allocation of the funds and also to ensure that the necessary review meetings take place (ideally at least annually). This will take the form of a Risk Conference where the projects are presented.
21. As a principle, no more than the available amount of funds should be contracted. However, the SteerCo could deviate from this principle provided that it has satisfied itself that there should be funds available to meet this non-budgeted-for expense.
22. As a general principle projects should be driven by research ideas from a technology pull perspective.

23. Each problem statement may result in one or more research proposals, each of which in turn may result in one or more articles, i.e. forming a one-to-many relationship as an inverted tree in the PS -> RP -> Article direction. It will also be possible to have one or more articles emanating directly from a problem statement, without an intermediate problem statement. The converse, e.g. one proposal for more than one problem statement or one article from more than one proposal (or article) will not be allowed.

### **Article prioritization and funding**

24. Articles will be prioritized and funded using a simple three-tier rating system:

- Academic Impact
- Industry Relevance
- Industry Collaboration

For the Academic Impact, the accreditation level of the Journal in which the article was published will be used, together with the impact factor of the journal. The Industry Relevance is further broken down into six high-level risk themes (Market Risk, Credit Risk, Operational Risk, Regulatory Risk, Systemic Risk and Investment Risk) and the assessment taken as the consensus view of a representative panel of industry representatives. The Industry Collaboration is the degree to which non-academics were involved as co-authors for the article. To be classified as “Yes”, at least one of the authors should in his/her affiliation statement at the beginning of the article state that he/she is full-time employed in a company (a Pty Ltd) in industry.

25. Articles that have resulted as a direct response to a problem statement (possibly via an intermediate research proposal) will be eligible for a “Closing-the-Loop” (Ctl) bonus. The quantum of the bonus will be determined by the problem statement owner and will reflect the extent to which the article addressed the problem(s) formulated in the problem statement.

### **Proposal prioritization and funding**

26. For research proposals only the “Industry Relevance” criterion is used with the same risk themes.

#### **Dissertation prioritization and funding**

27. For masters and doctoral dissertations in risk, only the “Industry Relevance” criterion is used with the same risk themes.

#### **Transparency and Fairness of Allocation**

28. It is a responsibility of the SteerCo that there as a fair allocation of basic and directed research between research themes, which should however be simultaneously balanced with the value-add that the project will provide to the Absa DST MoU.
29. The SteerCo should establish and ensure transparency in the research project prioritizing process as well as the allocation of funds.

#### **Distribution of funding allocation to Universities and further utilization thereof**

30. The funds allocated for Research Proposals and/or Published Articles go to the University of the University Representative who submitted the Proposal / Article to the Program Office (The “Principal University”)
31. The funds will be paid to the Research Office of the Principal University and has to be utilized / distributed according to the rules of that Research Office – typically to sponsor the research activities of the research team.
32. The University Representative, in conjunction with the Head of the Research Office, will be responsible to ensure that the allocated funds is used to further risk research as formulated in the funding objective in Clause 1 above.
33. For an article to qualify for funding, at least one author has to be a full time staff member of the Principal University
34. For an article to qualify for funding, at least one author from the Principal University has to be a South African Citizen.

35. In the case of multi-author articles where the authors are from more than one University, the University Representative of the Principal University can prescribe the %-split of the allocated *ex-post* funding between the participating universities.
36. Splitting of *ex-ante* funding for research proposal will not be allowed.

### **Acknowledgements**

37. If a funding was received for a proposal that resulted in an article, this should be acknowledged at the top of the article under “Acknowledgements”, as follows:

*This work is based on research supported in part by the Department of Science and Technology (DST) of South Africa. The grant holder acknowledges that opinions, findings and conclusions or recommendations expressed in any publication generated by DST-supported research are those of the author(s) and that the DST accepts no liability whatsoever in this regard.*

38. For an article to qualify for the CtL bonus mentioned above, the author has to also acknowledge the problem statement on which the article t was based, as follows:

*The research that lead to this article was initiated by an industry requirement [PSyynnn] by [PS Owner] from [PS Organisation] which was funded under the DST Directed Risk Research Programme (see BASA website <http://www.banking.org.za/consumer-information/research> for problem statement).*

### **Management support**

39. A 10% management fee will be deducted from the total DST funds for a particular year for general management, for example the organisation of the Risk Conference, solicitation of directed research projects and the allocation of funds to projects. In addition, up to an additional 10% may be reserved to subcontract suitably skilled people to assists with the programme management of the initiative.