



DST-NRF Centre of Excellence in  
Scientometrics and Science,  
Technology and Innovation Policy

## Management response to:

Mid-term review of the DST-NRF Centre of Excellence in Scientometrics and  
Science, Technology and Innovation Policy

Submitted by:

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## 1. Introduction

The Management Committee<sup>1</sup> of the DST-NRF Centre of Excellence in Scientometrics and STI Policy (SciSTIP) is pleased to submit its response to the Evaluation Report by the NRF-appointed panel that produced a mid-term review of the Centre. We would like to thank the Panel for the very detailed and comprehensive report. The report is rich in its findings as well as in the recommendations that are made. Our response follows the general headings of the Report.

## 2. General

The report does not, as far as we could establish, contain any factual inaccuracies. We would like to commend the Panel for this. Having said this, we do believe that some of the findings require further clarification and elaboration in order to provide more context and perspective.

The report is overwhelmingly positive in its assessment of the work of SciSTIP. This is reflected in the following excerpts from the Executive Summary:

The Centre of Excellence in Scientometrics and Science, Technology and Innovation Policy (SciSTIP) may be considered as a national asset of South Africa and more broadly of the Continent.

The results of the work of SciSTIP over the five years since its inception may be considered of high quality and at the level of excellence.

Over the last five years SciSTIP has had an important and relevant impact on the National System of Innovation and a moderate impact on the transformation of the country, also in view of the fact that the Centre operates in social sciences whose impact is by definition potential and indirect, and that often takes place in the long-term. The impact on the National System of Innovation has been through support to science and innovation policy making in South Africa and via the education of a class of professionals at the post graduate level where the quality of research and of teaching is very high.

At the same time, a number of suggestions are made in the Executive Summary that speak to areas of improvement:

Minor adjustments to the existing organisation and management of SciSTIP would be appropriate. These include the delegation process and the external visibility of the staff, marketing of services offered at the Centre, networking at local and regional levels.

The NRF contributes roughly half of the overall budget of the SciSTIP. Stellenbosch University (SUN) supports the Centre through a variety of ways, including the following: the DVC is the Chair of the Centre's Advisory Board; SUN gives considerable support to the Centre in the

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form of intellectual, management, administrative, infrastructural, financial, contractual and legal. SUN is strongly committed to support the Centre in the future.

More emphasis could be placed on science, technology and innovation and less on bibliometrics. In this context SciSTIP could expand the research on the methodologies and on the evaluation of the impact of science, technology and innovation in the economy and society.

A better integration amongst the partners (IERI, CHET, CWTS) would be welcome.

The report contains 10 main findings and make 11 recommendations. We respond to these in detail in the remainder of this report.

### 3. Main findings

1. It was felt by various people that "the Director is the Centre and the Centre is the Director".
2. Many people look interchangeably at the Centre and CREST.
3. The research staff of the Centre comprises of 6 researchers and 8 support staff expressed in Full Time Equivalent.
4. The research activity of the Centre is heavily linked to scientometrics (60-70%). The remaining share is in the area of technology and innovation policy.
5. The NRF contributes roughly half of the overall budget of the Centre. The financial documentation made available to the panel did not permit a complete picture of the situation. In particular the cost of projects appeared too low.
6. It was not possible to evaluate the contribution of TUT to the operations of the Centre.
7. During the period under review the Centre was able to adjust to the needs and requests of a changing environment - both in the scientific and in the policy areas.
8. In the planning stage of research projects the Centre pays attention to the diffusion of the results.
9. The issues of the transformation of the country and contribution to the NSI are key to the agenda of the Centre.
10. The succession of the director is an issue that the relevant institutions involved in the Centre have well in mind.

## 4. Recommendations

1. It would be appropriate to clarify what the contribution is of TUT to the overall performance of the CoE.
2. The work of the centre is very divergent and there is a need for a convergence and a synergy, possibly in the form of flagship projects that would involve 3 or more of the 4 groups.
3. Additional resources are needed in the form of additional staff (3-4) and an increased number of postdocs.
4. SciSTIP has the potential to be a knowledge hub in the Global South and should engage more with international partners, through reaching out and taking the lead as a model.
5. Informal collaborations with Stellenbosch and other colleagues, which is somehow unrecorded but which is very important, should be further promoted; however it is suggested that more diverse opportunities could be created through the offering of formal open calls.
6. Increased effort must be made to forge connections with more local universities.
7. The analytical capacity of the CoE in the area of the NSI would greatly benefit from collaboration with the Centre for Science, Technology, and Innovation Indicators (CESTII) - this would complement the scientometrics indicators with research and innovation indicators.
8. The reading and interpretation of the budget could be improved following the international guidelines of the System of National Accounts also used in the OECD Frascati Manual.
9. In-house fora for capacitation of students should be promoted.
10. It would be appropriate to make the Centre's staff members more visible. This would allow the structure to be less dependent on a single person. For capacitation of the centre's staff they must be allowed to assume responsibilities for certain projects by themselves.
11. There is a need for a more aggressive publicity drive to create visibility in order to attract future students, collaborators and work.

Some of these findings and recommendations address the same general topic. We have, therefore, grouped them together under eight more general headings and discuss the findings and recommendations under each heading together.

## 5. Our response

### 5.1 The role of the Director

At least two key findings of the panel relate to perceptions of the role of the Director, i.e. that he “is the Centre and the Centre is the Director” ([Finding 1](#)); that other research staff are not “allowed to assume responsibilities for certain projects” by themselves, or that there is a lack of “delegation” of commissioned research (Report, p.19).

The Management Committee responds to this finding by first highlighting the requirements of a director of a Centre of Excellence (CoE), as stipulated by the South African National Research Foundation (NRF), viz., he/she should be an “individual with high international research standing and, a proven track record of postgraduate student training and research management” and “employed by the host institution to lead the CoE”. It therefore is not surprising, and even expected, that the Director of SciSTIP embodies the vision of the CoE. This finding seems to be based, at least in part, on the perception that SciSTIP’s partners (e.g. the Department of Higher Education and Training, the National Advisory Council on Innovation, and the Department of Science and Technology) primarily approach the Director for commissioned research. This tends to be the case, as the Director is considered an “individual with high international research standing” among these partners.

We would, also like to highlight that, in accordance with the Memorandum of Agreement (MoA) with the NRF, the Management Committee, and not solely the Director, carries responsibility for allocation of CoE finances for human capital development and research activities. He is assisted in this regard by two managers (a research manager and a centre manager) as well as three individuals who are directors of their own centres (the Node Head at the co-host, and representatives of the collaborating institutions). The Node Head at Tshwane University of Technology’s (TUT) Institute for Economic Research on Innovation (IERI) is specifically tasked with assisting the Director in managing the CoE.

In response to the observation that the Director takes main or even sole responsibility for commissioned research, the Management Committee would like to highlight the opposite, i.e. that there are many instances of such research conducted by the institutional partners of SciSTIP, in which the Director of SciSTIP is not directly involved. In addition, there are many instances of delegation, to other research staff at the Hub, of responsibilities associated with commissioned projects. Their involvement in such projects is carefully managed to increase their visibility in their respective fields

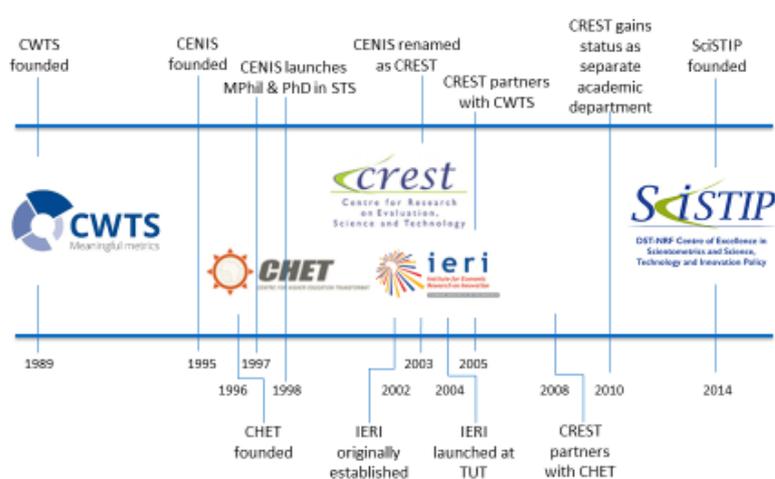
of expertise. We believe that this is clearly documented on the SciSTIP website as well as the three annual reports that we have produced since 2014.

However, it is recommended that the Centre's staff should assume greater responsibilities for certain (commissioned) projects by themselves, to capacitate them and increase their visibility. The Management Committee is therefore in agreement that the Director carries an increasingly heavy workload, and (as the panel notes in their report) succession of the Director is an issue that the relevant institutions involved in the Centre should keep in mind ([Finding 10](#)).

## 5.2 The relationship between SciSTIP and CREST

The panel found a perceived lack of clear division between SciSTIP and its host centre, CREST ([Finding 2](#)). This perception may be attributed to the fact that SciSTIP emerged from CREST, which was founded almost 25 years ago. A “parent–child relationship” inevitably prevailed in the first few years of SciSTIP's existence, but the CoE is increasingly developing its own identity and brand. For one, the relationship between SciSTIP and CREST and its other institutional partners is quite clearly communicated on the website. In our Self-evaluation report, we highlighted the fact that SciSTIP is a relatively new (virtual) entity that is the result of bringing together four separate, pre-existing entities. We provided the diagramme below to represent the ‘genesis’ of SciSTIP.

### The genesis of SciSTIP



Nevertheless, the Management Committee agrees that, where this perception is being reproduced and diffused through the actions of the CoE and CREST, 'remedial' action may be necessary. Possible steps include: ensuring that, when SciSTIP staff present themselves, they are clear on the nature of the relationship of the CoE with CREST; clearly identifying a SciSTIP core team, and more clearly distinguishing between "CREST projects" and "SciSTIP projects".

### 5.3 The contribution of TUT to SciSTIP

The absence of representatives from TUT (viz. the Director of IERI and the Deputy Vice-Chancellor: Research, Innovation and Engagement) probably contributed to the panel's finding that it was not possible for them to evaluate the contribution of TUT to the operations of the Centre (Finding 6). However, this is not considered a major issue of concern, as CREST functions as the primary operational "hub" of SciSTIP, where three members of the Management Committee (the Director, Research Manager and Centre Manager) are located.

With regard to the contribution of TUT to the overall performance of the CoE, the panel requested clarification. In response, we present (Table below) an overview of the contributions of the different partners in SciSTIP to different categories of scholarly output between 2014 and 2018. This is information that is regularly discussed at the strategic reflection meetings of SciSTIP. In our preparation for the next five years of the CoE's work, this issues remains on our agenda. A few points of clarification on the table are required:

- The figures on research publications are weighted: a book (monograph) is given a weight of 10 units in compliance with DHET policy.
- The figures on student output show that CREST is the only contributor to the formal Education and Training KPA of the Centre. All students supported under the CoE are currently registered at CREST for either the Masters or PhD in Science and Technology Studies. Attempts by IERI to register a post-graduate programme in Innovation Studies, in order to contribute to the production of students, have not been successful.
- The bulk of the human resources of SciSTIP is located at CREST. CHET and IERI currently only have one and two full-time staff members respectively.

TABLE: SciSTIP OUTPUTS SINCE 2014, PER INSTITUTION

Output type	2014				2015				2016				2017				2018				2014 to 2018
	CREST	IERI	CHET	CWTS	CREST	IERI	CHET	CWTS	CREST	IERI	CHET	CWTS	CREST	IERI	CHET	CWTS	CREST	IERI	CHET	CWTS	
Books (monographs)					5,0		5,0		10,0								10,0		10,0		40
Book chapters in edited collections	3,0	2,0	1,0		4,0	4,0	9,0		7,0	17,0	4,0	1,0	1,0	1,0	9,0	1,0	4,0	2,0	13,0	1,0	84
Articles in peer-reviewed journals	6,0	1,0	1,0	1,0	6,0		1,0	1,0	12,0	3,0	1,0	4,0	16,5			10,5	17,5	3,5	2,0	7,0	94
<b>SUBTOTAL PUBLICATIONS</b>	<b>9,0</b>	<b>3,0</b>	<b>2,0</b>	<b>1,0</b>	<b>15,0</b>	<b>4,0</b>	<b>15,0</b>	<b>1,0</b>	<b>29,0</b>	<b>20,0</b>	<b>5,0</b>	<b>5,0</b>	<b>17,5</b>	<b>1,0</b>	<b>9,0</b>	<b>11,5</b>	<b>31,5</b>	<b>5,5</b>	<b>25,0</b>	<b>8,0</b>	<b>218,0</b>
<b>Institutional share</b>	<b>60%</b>	<b>20%</b>	<b>13%</b>	<b>7%</b>	<b>43%</b>	<b>11%</b>	<b>43%</b>	<b>3%</b>	<b>49%</b>	<b>34%</b>	<b>8%</b>	<b>8%</b>	<b>45%</b>	<b>3%</b>	<b>23%</b>	<b>29%</b>	<b>45%</b>	<b>8%</b>	<b>36%</b>	<b>11%</b>	
Contributions to conferences proceedings						3,0			7,0	1,0	1,0	6,0	18,0			2,0	1,5	0,5			40
Presentations	27,0	16,0	4,0		18,5	18,0	9,5	1,0	48,5	26,5	31,0	18,0	71,0	44,0	2,0	13,0	40,0	29,0	7,0	13,0	437
<b>SUBTOTAL PRESENTATIONS</b>	<b>27,0</b>	<b>16,0</b>	<b>4,0</b>	<b>0,0</b>	<b>18,5</b>	<b>21,0</b>	<b>9,5</b>	<b>1,0</b>	<b>55,5</b>	<b>27,5</b>	<b>32,0</b>	<b>24,0</b>	<b>89,0</b>	<b>44,0</b>	<b>2,0</b>	<b>15,0</b>	<b>41,5</b>	<b>29,5</b>	<b>7,0</b>	<b>13,0</b>	<b>477,0</b>
<b>Institutional share</b>	<b>57%</b>	<b>34%</b>	<b>9%</b>	<b>0%</b>	<b>37%</b>	<b>42%</b>	<b>19%</b>	<b>2%</b>	<b>40%</b>	<b>20%</b>	<b>23%</b>	<b>17%</b>	<b>59%</b>	<b>29%</b>	<b>1%</b>	<b>10%</b>	<b>46%</b>	<b>33%</b>	<b>8%</b>	<b>14%</b>	
MPhil (STS) students					5				15				6				3				29
PhD (STS) students	2								2				1				7				12
<b>SUBTOTAL STUDENTS</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>41</b>
<b>Institutional share</b>	<b>33%</b>				<b>100%</b>				<b>100%</b>				<b>100%</b>				<b>100%</b>				
<b>TOTAL ALL CATEGORIES</b>	<b>38,0</b>	<b>19,0</b>	<b>6,0</b>	<b>1,0</b>	<b>38,5</b>	<b>25,0</b>	<b>24,5</b>	<b>2,0</b>	<b>101,5</b>	<b>47,5</b>	<b>37,0</b>	<b>29,0</b>	<b>113,5</b>	<b>45,0</b>	<b>11,0</b>	<b>26,5</b>	<b>83,0</b>	<b>35,0</b>	<b>32,0</b>	<b>21,0</b>	<b>736,0</b>

	2014	2015	2016	2017	2018
Totals for SciSTIP	64	90	215	196	171

Note on books and edited collections: In accordance with DHET policy, a book (monograph) is weighted with 10 units. For edited collections we count the individual chapters each as a single unit. To avoid double counting, we do not also count the edited collection as an additional unit.

#### 5.4 Staffing and students

The panel correctly observed that, at the time of the review, the research staff of the Centre comprised of 6 researchers and 8 support staff (expressed in full-time equivalent) ([Finding 3](#)). It therefore recommends additional resources in the form of three to four additional staff and an increased number of postdoctoral associates.

The Management Committee generally agrees with the need for an increase in the staff complement of SciSTIP, including assistance at Leiden University's Centre for Science and Technology Studies (CWTS). An adequate presence of especially senior research staff, with the necessary expertise and experience to supervise postgraduate students, is one of the key conditions to the success of the CoE. Additional funding will allow the CoE to attract such staff. However, employment of additional (permanent) staff is dependent on a number of considerations.

First, the human-resource arrangements and processes of the host and co-host institutions (already referred to above) may prove an obstacle to their appointment. Secondly, the NRF's current allocations in the budget for staff would need to be significantly increased to allow for the appointment of additional staff. Thirdly, experience has shown that the pool of suitable candidates with the required expertise is extremely limited. We have therefore also embarked upon a longer-term strategy of "growing our own timber". For example, a female PhD student who completed her studies this year has already been offered a SciSTIP postdoc positions with effect from 2019. A second PhD candidate who will complete her studies in 2019, is also earmarked for a similar offer in 2020.

A recommendation pertaining specifically to the postgraduate students of SciSTIP, is that in-house fora for their capacitation should be promoted. The Management Committee welcomes this suggestion and will engage in a conversation with the students to determine how their needs in this regard could be met. Possibilities include creating a relatively informal, collegial space where, on a monthly basis, students can share research-related issues with their peers, some of the more experienced researchers at SciSTIP, and possibly other interested persons; organising special events for students, according to a model recently implemented at CWTS, which tasks a PhD coordinator with the administration of such events, but also with creating more interaction and togetherness among the students; and/or requesting SU's Faculty of Arts and Social Sciences Graduate School, which holds regular seminars, to include CREST PhD students.

## 5.5 Financing and budgeting

The panel observed that the NRF contributes roughly half of SciSTIP's budget, which the Management Committee interprets as a favourable comment on SciSTIP researchers' ability to leverage additional funding (Finding 5). The panel did note, however, that the financial documentation made available to them did not permit a complete picture of the situation. For detailed information of the additional funding leveraged, the annual progress reports to the NRF, as well as principal investigators' reporting on additional funding within each approved research project, could have been consulted by the panel. The more specific finding of the panel that the cost of projects appeared too low, may be explained (as indicated in the documentation provided to the panel) by the fact that several projects were continued with a zero budget for 2018, mainly due to the fact that they have non-cost deliverables scheduled for 2018.

The panel recommended that the reading and interpretation of the budget could be improved upon, specifically by following the international guidelines of the System of National Accounts (SNA), which is also used in the OECD Frascati Manual. In response, The Management Committee would like to point out that financial reporting in the Annual Progress Report to the NRF has to comply with the budget line items and guidelines stipulated in the DST-NRF CoE Handbook. In addition, the required external audit report is based on full-cost reporting and reports within the cost-centre parameters of the institutional host, (SU). Given the reporting requirements of the NRF and Stellenbosch University, changing to the SNA, which applies mainly to Statistics South Africa and the Reserve Bank, is not an option.

## 5.6 The intellectual focus of SciSTIP

In addition to operational issues mentioned above, the panel also concluded that the research activity of the Centre is heavily linked to scientometrics (60-70%), with the remaining share in the area of technology and innovation policy (Finding 4). The Management Committee would like to point out that this observation does not in fact reflect the full scope and range of the work of SciSTIP. For example, higher education research (undertaken by the Centre for Higher Education Trust [CHET], but also by members of CREST), as well as surveys on research topics other than technology and innovation policy, constitute a substantial part of SciSTIP's research activity.

At the inception of SciSTIP in 2014, the Management Committee adopted a Research Strategy Framework that outlines the five main research focus areas of the CoE (<http://www0.sun.ac.za/scistip/research/>)

These are:

1. Science in (South) Africa
2. Human resources for science and technology
3. Research evaluation
4. Science and technology and innovation studies
5. Communication in and of science

We would maintain that a deeper engagement with the project information on our website, as well as the annual reports of the CoE, would have clearly shown that our research portfolio is much more diverse – both in substance and methodology – than an exclusive focus on scientometrics. Although it is true that scientometric and bibliometric methodologies are applied in many of our studies, the substantive topics of many of our projects address the key research priorities of the five areas listed above. In addition, we also employ a host of other methodologies including qualitative and mixed-method designs.

Although partial, the panel's finding may be taken to signal a relatively weak intellectual focus on technology and innovation policy, which itself reflects the current division of labour between IERI (within which the expertise in science, technology and innovation [STI] policy primarily lies) and CREST. To address this issue, recently forged linkages between higher education research and the domains of science, technology and innovation will be further strengthened in our planning going forward.

In this respect, we would also like to respond to the panel's finding that the work of the Centre is very divergent, and subsequent recommendation for convergence and synergy. Although we do not necessarily agree that our research portfolio is very divergent, we are currently initiating a process to relook at our key focus areas for the next five years. To this end, a planning roundtable has been scheduled for 8 and 9 November 2018, when, aided by a number of international and national experts, we aim to discuss one of the strategic priorities for SciSTIP for the next five years, viz. *Science and higher education in Africa: A research agenda for the future*.

## 5.7 The impact of SciSTIP

On the issue of the CoE's impact, the panel's findings were very positive. It notes that, during the period under review, the Centre was able to adjust to the needs and requests of a changing environment – both in the scientific and in the policy areas ([Finding 7](#)). This finding suggests that SciSTIP is at the forefront scientifically as well as being well-informed in terms of policy changes. Contextual

relevance is an expectation from our stakeholders that SciSTIP will continue to meet through our engaged scholarship, as well as by maintaining the close relationships the directors of CREST, CHET, IERI and CWTS have with stakeholders in government and higher education.

Another impact-related finding of the panel is that the issues of the transformation of the country and contribution to the national system of innovation (NSI) are key to the agenda of the Centre. The Management Committee thanks the panel for recognising its efforts in this regard, and are unanimous in their support of projects that specifically address these issues. Examples include the recently concluded “Young Scientists in Africa” project, and a project CHET is planning on the health of science and education, which will pay specific attention to these issues.

On a more operational level, the panel further recognised that the relevance and impact of SciSTIP’s research are facilitated by paying attention to the diffusion of the results already in the planning stage of research projects. We will continue to request SciSTIP-affiliated researchers to submit, as part of their research funding proposals, an indication of a variety of outputs they intend to produce to disseminate their findings – not only amongst their peers, but also to other audiences (taking into account their capacity to absorb and engage with our research findings). The Management Committee also endeavours to further increase the communication of its results, through further production of its SciBytes series and a SciSTIP working papers series. In addition, an overarching science communication policy for SciSTIP will be discussed at the Steering Committee meeting in November 2018, for possible implementation in 2019.

## 5.8 Networking and collaboration

According to the panel, SciSTIP has the potential to be a knowledge hub in the Global South. It therefore recommends increased engagement with international partners, through reaching out and taking the lead as a model. The Management Committee would like to point out that SciSTIP already engages with a large number of international partners. CHET alone works with approximately 50 collaborators from 15 countries, of which eight are African; while IERI plays an active role in GLOBELICS, AfricaLICS, and BRICS. And, as mentioned before, one of the strategic priorities for SciSTIP for the next five years is science and higher education in Africa, which will undoubtedly facilitate the type of engagement the panel recommends. We will be considering a suggestion by CWTS that SciSTIP initiates a project (on science/innovation) to further increase our engagement with international partners in the Global South, specifically Brazil and other South American countries.

The panel also considered SciSTIP's collaborations of a more "informal" nature, especially with colleagues at SU, as very important, although "unrecorded". The Management Committee is not quite clear as to what "informal" collaboration refers to. We surmise that it may refer to the growing collaboration with the Department of Industrial Engineering as well as other more individual collaborative projects with the department of Psychology and the Faculty of Education). With an eye to further promotion of collaboration, we intend to broaden existing knowledge networks and create new ones. However, we do not agree with the panel's recommendation that more diverse opportunities could be created through the offering of formal open funding calls. The underlying assumption, that there is a pool of data and expertise that would respond to such calls, does not correspond with our experience. However, offering a limited open calls in the near future could be considered, after we have investigated other CoEs' approaches and experiences in this regard.

The panel further recommends investing increased effort to forge connections with more local universities. The Management Committee found the meaning of the term "local" somewhat unclear (i.e. does it refer to South Africa, Southern Africa, or sub-Saharan Africa?). Individual SciSTIP researchers and partners have several partnerships with universities in South Africa and in the wider SADC region. Research fellows such as Prof Radhamany Sooryamoorthy (UKZN) and Dr. Michael Gastrow (HSRC) have also been appointed as part of this initiative. As mentioned above, the Management Committee intends to broaden existing knowledge networks and create new ones, but not necessarily on the basis of the location of those networks, and within the bounds of our expertise and available human resources.

In addition to collaboration with local universities, the panel further recommends collaboration with the HSRC's Centre for Science, Technology, and Innovation Indicators (CESTii). According to the panel, the analytical capacity of the CoE in the area of the NSI would greatly benefit from such collaboration, in particular as it would allow for scientometrics indicators to be complemented with research and innovation indicators. The Management Committee tends to agree that such complementarity would be beneficial, but the "consultancy contract" conditions (as opposed to "academic" conditions) in which the HSRC operates unfortunately prevents any large-scale or formal partnership between them and the CoE.

In order to attract future collaborators, but also students and research opportunities, the panel recommends a more aggressive publicity drive that would enhance the Centre's visibility. The Management Committee concurs that more effort is needed in this regard. Some initiatives are

already taking shape, such as forming a “communication group” involving two recently graduated PhD students in science communication. In addition, and as already mentioned, a draft science communication policy will be discussed at the Steering Committee meeting in November 2018, for implementation in 2019. With regards to attracting more students, it should be noted that the Centre is already supervising at maximum capacity.

## 6. Conclusion

SciSTIP has found the engagement with the NRF panel very useful and informative. We particularly applaud the approach taken by the Chair person and the other panel members that reviews of this nature should primarily aim at identifying constructive learning opportunities. The final report by the panel has indeed identified a number of such areas for learning and improvement. We will engage with these in a more structured and planned way going forward in ensuring that we continue to meet the high expectations of our stakeholders.

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