

Review of the South Africa– Norway Programme on Research Cooperation - Phase II

Norwegian Ministry of Foreign Affairs

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Abbreviations

DHET	Department of Higher Education and Training
DoE	Department of Education
DST	Department of Science and Technology
GMSA	Grant Management & Systems Administration
HDG	Historically disadvantaged group
IR&C	International Relations & Cooperation
JC	Joint Committee
KPI	Key Performance Indicator
NGO	Non-governmental organization
NMFA	Norwegian Ministry of Foreign Affairs
NIFU/STEP	Norwegian Institute for Studies in Innovation, Research and Education
NRF	National Research Foundation
PI	Principal Investigator
RCN	Research Council of Norway
ToR	Terms of Reference

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1 Summary

A key objective for this second phase of the "South Africa–Norway Programme on Research Cooperation" is the promotion of research excellence in fields of mutual concern and relevance. Both countries wanted a partnership programme based on equality, where comparative advantages could be matched to produce first-class research. The Programme conference in September 2010 marked the end of this second phase. The focus has already turned towards a third phase, with a thematic focus on the environment, climate change, and clean energy.

To evaluate the second phase, two studies were to be done. First, an impact assessment to analyse the results from the Programme; and second, an independent external review to assess the administrative arrangements — this Review. The impact study is yet to start, which is most unfortunate, as that study was meant to provide key inputs to the administrative analysis. Results are, after all, what the Programme is about.

Key Findings

The key document describing the Programme is the **Business Plan** of 2006, signed by the two countries. This is a detailed operational document. Both national funding agencies involved, the RCN and the NRF, were supposed to follow their own standard procedures in day-to-day administration as would be the case in any typical research-funding procedure in their respective countries.

Such a decentralized administrative structure has obvious advantages in terms of daily operations — no new processes are necessary in either country, and the secretariats, universities and scientists know "the drill".

The **decision-making structure** consists of three layers, namely: a) the Annual Meeting, with the governments of South Africa and Norway ensuring that the basic Agreement is adhered to; b) the Joint Committee (JC), which functions as a Board for the Programme; and c) the secretariats, which ensure the Programme's implementation and day-to-day operation.

This structure appears to have worked well, because the Business Plan explains responsibilities in detail, and because by now there is substantial experience with this type of operation. The key change from Phase I was in the project selection procedures, with now only one set of referees and an expanded Joint Committee. This adjustment cut down on bureaucracy, and also made the exercise more of a joint responsibility.

The **application and assessment procedures** are well described in the Business Plan and in the Application Guidelines. Whilst it is too early to say anything definite about the ability of this practice to choose the right projects, all indications so far are that it has managed to select a solid research portfolio.

This Review finds that both the Programme and the Application Guidelines are reasonably clearly written and logically presented. This is also how the Principal Investigators (PIs) of the projects perceive them.

After the selection process, there was **regular reporting** according to the normal practices of the RCN and NRF, but otherwise little by way of interference in the projects from the Programme administrators. Such minimal reporting procedures have clearly suited most of the PIs.

The Business Plan requires the Programme and the projects to be assessed annually according to a long list of **Key Performance Indicators** (KPIs). Such detailed reporting has not happened in practice. As long as the projects themselves do not report according to the required format, the Programme cannot be expected to do so either. This is a logical fallacy of the Business Plan. Further, the results asked for are visible only after a period of time, and seldom on an annual basis as called for by the Business Plan. Thus, reporting on all the "additional issues" has been postponed to the final report that will be delivered after the projects are finalized. In conclusion, the KPIs have so far added nothing to performance monitoring or supervision of progress.

The one administrative issue that appears to have been a continuous headache to both secretariats is **financial reporting**. The NRF and the RCN manage their respective projects according to existing administrative procedures at each institution. Unfortunately, the two sets of procedures have basic differences that cannot easily be reconciled when finances are aggregated at a Programme level. The financial years are different in Norway and South Africa, and the RCN and NRF report different types of figures on an annual basis. Fluctuations in the exchange rate compound the difficulties.

The NRF's requirement that claims are to be made by university research offices against actual costs before money can be paid out has also meant that substantial funds are lying unspent at the NRF.

These challenges of aggregation cannot be easily resolved as long as funds are distributed through two different systems as has been the case to date. Either one institution takes over total responsibility, or a new unit is established with a common procedure for all. This would be a major administrative reorientation, however, and one that would need further analysis and consideration before being implemented. Whatever remedy or solution is chosen, it is clear that the **financial reporting has to be improved** in the next phase.

There are no indicators in the Business Plan by which one can assess the **efficiency of the two secretariats**. Our assessment is therefore based on interviews to a large extent. The PIs all concur that the RCN secretariat has performed all its tasks to their satisfaction. They attribute this to a combination of staff stability that has helped to establish a solid institutional memory, and recruitment of a dedicated and highly competent co-ordinator. Researchers are complimentary about the streamlined way that the Programme is run and the welcome lack of red tape.

A complaint conveyed to the assessment team is that the relatively high turnover of staff at the NRF, and internal reorganization, may have reduced institutional memory and thus created some agency inefficiency. The **NRF should be strengthened** in performing the functions for which it is responsible if it is to play a successful core administrative role in the next phase.

With regard to the **effectiveness** of the Programme, research partners in Norway were chosen principally on the basis of established networks or a history of working with their South African counterparts. Moreover, the African connections of some Norwegian grant-holders have allowed South African researchers to extend their reach elsewhere on the continent.

However, selecting students from **historically disadvantaged groups** (HDGs) continues to be a major problem for reasons that reflect the legacy of apartheid — it is hard to recruit black master's and doctoral students because there are insufficient bursaries and top-ups to compensate for employment opportunities open to them in other sectors; furthermore, their academic skills may lag behind those of other students and so they require more time for supervision. Nevertheless, most of the projects appear to have made an effort to involve HDGs, and some have succeeded quite well. Without the impact study, however, it is hard to assess the full contribution of the Programme to benefiting these particular students, but it seems fair to conclude that this is an area where more innovative thinking, and additional funding, are needed.

The Business Plan for Phase II states that the **main Programme beneficiaries** are intended to be:

- Researchers, postdoctoral candidates and postgraduates (master's and PhD students)
- Young researchers from historically disadvantaged groups in South Africa, and
- Women researchers.

However, the Business Plan does not provide guidance as to how to rank these three groups, and leaves the JC to weigh the different objectives against each other. The JC first graded and ranked proposals based on scientific merit. Then proposals were considered in the light of their potential for redress and capacity building. Given the rationale for the Programme, we find it difficult to fault this selection process.

As regards the achievement of goals, it is of interest to note that:

- There has been a clear increase in the number of co-authored papers and articles by South African and Norwegian researchers during the 2005–2008 period.
- The positive trend from the first phase in terms of scientific publications seems to have continued.
- Since Phase I, the share of female researchers in the Programme has increased significantly (from 9 out of 40 principal investigators/project leaders in Phase I, to 9 out of 27 in Phase 2 on the Norwegian side; and from 8 out of 40 to 6 out of 27 on the South African side).
- The involvement of researchers and research students from historically underprivileged groups will have been higher in Phase II than it was in Phase I.

A principal objective of the Programme is to build **sustainable cooperation** and long-term research collaboration beyond the end of the current phase. In the absence of the impact study it is difficult to say much about this, except that a number of projects are continuations of earlier collaborations, and that most PIs express clear interest in continuing the partnerships.

A second aspect of sustainability is whether the projects are able to integrate students in a way that expands knowledge and ensures the sustainability of the professional capacity built through the research. With few exceptions, all projects involve students doing a master's or a PhD. Some of these young scientists will most likely continue their academic pursuits.

Sustainability of institutional collaboration and of knowledge is contingent on a host of factors outside the Programme, such as the level of faculty funding at each university. Financially strong research environments are to be preferred if sustainability is considered important. This, however, would risk excluding many of the historically disadvantaged South African institutions. In a future Programme, we recommend providing a clear definition of what is meant by sustainability.

It appears that virtually all channels of **promotion and dissemination** have been applied. All of the projects report submission of, and acceptance of, one or more papers by international peer-reviewed journals and in books. An unknown, but we believe a substantial, number of articles are awaiting a publishing decision by such journals.

Projects under this Programme that are of an applied nature, and often with direct policy relevance, typically disseminate by means of their established networks using online distribution and websites, and popular articles, press releases, movies, TV programmes and interviews, as well as DVDs have been submitted for circulation among stakeholders and decision-makers. Research outcomes have been presented as part of awareness-raising campaigns to local stakeholders (including farmers, fishing communities, and rural populations) as well as to political decision-making bodies at national and local level.

The 2009 additional grant allocation made available from the Programme for the purpose of enabling the researchers to disseminate their findings more widely proved helpful to many projects. The highly heterogeneous portfolio of research projects funded by this Programme does not lend itself to a uniform format of promotion and dissemination of outcomes and findings. The current approach, which has left it to each project to choose how to promote, communicate and disseminate its findings, appears to have worked reasonably well for Phases I and II, but can certainly be further refined.

Key recommendations and comments relevant to a next Phase

- Do not include unrealistic reporting requirements in the Agreement signed by the two governments — and ensure that current procedures can support the requirements that are made. One common reporting format is preferable — but is difficult with the "two secretariats–normal routines" structure.

- Avoid the use of undefined performance indicators such as "*extent of staff and student exchanges*".
- Spell out the reporting requirements clearly in the Programme documentation so that every project is explicitly aware of what will be required.
- Indicate clearly the tasks to be performed by the secretariats, including indicators for performance, in terms of explicit systems and procedures to be followed.
- Use KPIs sparingly and, if one wants to include them, incorporate them into the projects in such a way that they are effective monitoring tools.
- The financial reporting systems have to improve in the next phase. A remedy — but not a solution — for the challenge of financial aggregation is to describe explicitly and in detail how budgets and accounts are to be combined and reconciled. More fundamental organizational changes may have to be considered.
- It might be sensible to consider a budget-support type of structure (meaning that donors fund a total budget and not individual items) if several different funders were to participate in a Phase III, with simple financial reporting formats.
- Strengthen the NRF secretariat's ability to administer such a programme in a timely and efficient way, and enable it to become more appreciative of the scientific work of the grant-holders, through the appointment of staff of sufficient seniority, knowledge and experience.
- More effort and creativity are needed to recruit and retain greater numbers of students from historically disadvantaged groups in future research cooperation. A solid analysis should be conducted on how to do this as part of the preparations for Phase III.
- Another issue to elaborate on, as part of the design of a Phase III, is the practical details of implementation of the sustainability objective.
- If a Phase III is approved, with a much narrower focus on the environment, climate change, and clean energy — and especially if the projects are intended in part to give policy advice — then a strengthening of the secretariats for a coordinated and perhaps centralized approach to communication, promotion and dissemination of findings and outcomes should be considered.
- The individual grant-holders should be given the resources and support to promote their work to a wider audience, including informing their fellow grant-holders of their research interests and achievements. This would help them to meet a major objective of the Programme.
- A system of regular briefings, informing the principal funding agencies of both countries about the novelty and significance of the research and its implications, would help them to keep abreast of the broader impact and value of the Programme.

2 Introduction and Background

The second phase of the "South Africa–Norway Programme on Research Cooperation" is the latest in a long line of collaborative initiatives between the two countries within higher education and research. What started as support for bursary funds for South African students in exile in the early 1990s has, by 2010, developed into high-level quality research cooperation involving a number of universities and institutions in both countries.

A key objective for both the first (2001–2006) and the second (2006–2010) phase of the Programme is the promotion of research excellence and quality in fields of mutual concern and relevance. Both countries were believed to benefit from a partnership programme based on equality, where comparative advantages can be matched to produce quality research. The principle of mutual advantage is a key foundation of the Programme.

The first phase, which ended in 2006, was deemed to have been successful and, in that same year, a second phase was agreed upon. The new Business Plan for Phase II (2006–2010) was signed in May 2006, committing the Norwegian government to a contribution of up to NOK 40 million and South Africa's Department of Science and Technology (DST) to a minimum of ZAR 9 million for funding collaborative research projects. In addition to this amount, the South African government contributes to the running costs on the South African side, and to a total of R701 000 for a project unilaterally funded from South Africa.

A single call for proposals resulted in 27 projects being selected for funding out of 82 applications submitted. The overall operational structure was similar to that of the first phase, with similar priority areas, objectives, intended beneficiaries and application procedures. The Research Council of Norway (RCN) and the National Research Foundation (NRF) were once again designated as the Programme's implementing agencies. Some changes were made to the assessment procedures, but the second phase was otherwise very much "business as usual".

The second phase was scheduled to end in September 2010, with a few projects given extensions due to earlier delays. Both countries have expressed clear interest in continuing the research cooperation into a third phase, but in that case with a thematic focus on the environment, climate change, and clean energy.

To review the second phase, two separate analyses would be commissioned. The first would be an impact assessment to map and analyse the results from the Programme; the second would be an independent external review to assess the administrative arrangements. This Review is the administrative part of this two-pronged review strategy.

The Review was initially scheduled to start in early June, but a rather important event involving international football games in that and the following month took precedence,

so this exercise did not proceed until August, with a one-week visit to South Africa in the middle of the month.

The Review Team consisted of Dr Graham Baker — appointed by the NRF in South Africa — and Stein Hansen and Erlend Sigvaldsen from the Nordic Consulting Group.

Methodology

At the time of writing (September 2010), the planned impact study is yet to start. This is most unfortunate, as that study was meant to provide key inputs to this administrative review. "Results" are, after all, what the Programme is about, and the quality of outputs from the projects will provide important indications of the efficiency of the Programme administration.

In the absence of the impact study, the prime sources for this Review's "project results" have been the progress reports and interviews with project leaders. This exercise could not be conducted with sufficient analytical rigour to allow us to reach our conclusions with complete confidence, but it has given us a reasonable understanding of the achievements. However, it is important to point out that "results" are not a key focus in this Review, as it is the impact study to come that will delve more deeply into the many-faceted achievements of the 27 projects.

To address the questions posed in the Terms of Reference (ToR), a wide-ranging methodology has been applied consisting of four main elements:

- *Review of relevant documents*, including full sets of progress reports, background analysis, agreements and correspondence among the parties to the Business Plan, minutes from annual meetings, the proceedings, guidelines, rules of procedure, and relevant documentation of the Joint Committee (JC).
- *Interviews with a number of key stakeholders*, including representatives of the Norwegian Embassy in Pretoria, Norad, South Africa's DST, the NRF, and the RCN. Seven projects and project leaders were visited in South Africa, plus other staff at relevant universities.
- *A questionnaire to all 27 project leaders*, in both countries. No interview information has been used in such a way that individual respondents can be identified.
- *Discussions with administrators and project leaders* during and after the concluding Programme Conference on 20–21 September.

By 9 September 2010, a total of 25 questionnaires had been completed by principal investigators (PIs) and submitted to the review team: 13 of the completed questionnaires came from Norwegian PIs, and 12 from South African PIs. For 9 of the 27 projects that have received funding under the Programme, both the Norwegian and the South African PIs completed the questionnaire. This means that completed questionnaires have been received from either the Norwegian and/or the South African PI for 18 out of the 27

projects. In view of the short timeframe for collecting such data, this must be considered a satisfactory response rate.

From the start of the assignment in the second week in August, the review had limited time available, as a draft report was to be presented at the concluding Programme Conference on 20–21 September at Roodevallei Conference Hotel, Kameeldrift, Pretoria. While we might have wished for more time on some of the issues, ***the information gathered gives us sufficient material to report with reasonable confidence on most of the topics raised in the ToR.***

3 Management and Administration

The key document describing Phase II of the Programme and outlining its operation is the Business Plan of 2006, signed by the two countries. With a few exceptions, this document is based on the Business Plan for the first phase of the Programme. Thus, it appears that for the most part the management and administrative arrangements are simply a continuation of the first phase, namely, to implement the Programme with two parallel implementing agencies (that is, the secretariats), one based in Norway and the other in South Africa.

The Norwegian Ministry of Foreign Affairs (NMFA) designated the RCN as the implementing agency, whereas the South African departments of Science and Technology (DST) and of Education (DoE) (now the Department of Higher Education and Training [DHET]) appointed the NRF as the South African counterpart.

Each national institution was supposed to follow standard procedures in its day-to-day administration as would be the case for any typical research-funding procedure in their respective countries. (There were exceptions regarding the practices followed in the Call for Proposals and in the assessment of this call, as we observe below.) Thus, there was no single procedure that regulated all the projects with regard to payment and reporting, for instance. Instead, the Norwegian institutions reported and were paid according to RCN guidelines, whereas the South African partner followed NRF guidelines.

Such a decentralized administrative structure has obvious advantages in terms of day-to-day operations — no new protocols are necessary in either country, and secretariats, universities and scientists know "the drill". However, the one area that becomes exceedingly complex under such a system is the aggregation of financial reporting, where two very different systems are integrated and, so far as possible, reconciled. This, as we discuss below, is somewhat like combining oranges and apples.

The ToR raises several questions relating to specific aspects of the administration, which are commented upon below.

3.1 Decision-making Structure

The decision-making structure consists of basically three layers, namely:

1. The Annual Meeting, with the governments of South Africa and Norway ensuring adherence to the basic agreement.
2. The Joint Committee, which functions as a Board for the Programme, providing oversight and management guidance.
3. The secretariats, which ensure implementation and manage the day-to-day operations.

The formal decision-making bodies of the Programme are the NMFA in Norway and the DST/DoE (DHET) in South Africa. The *Annual Meeting*, which is chaired by the DST, constitutes the highest decision-making level within the framework of the Phase II Business Plan. The agenda of the Annual Meeting is focused on discussions of:

- The progress of the Programme, including results and fulfilment of agreed obligations
- Approval of annual progress reports and financial reports
- Approval of annual work plans and budgets for the following year
- Issues of special concern for the implementation of the Programme.

The *Joint Committee* is appointed to approve working documents and to award and allocate grants; it is responsible for overseeing the implementation of projects and the management of the Programme, and it evaluates the research results. It is the JC that prepares the key decisions that the Annual Meeting approves so long as they conform to the Business Plan.

The JC is composed of 6 members – 3 from each country, two representing the formal decision-making bodies, and one the respective secretariat. In view of the multitude of functions assigned to the JC, this body has been reinforced with scientific experts to assess and rank the research proposals, as well as to review the projects' progress and final reports whenever deemed necessary. It should be noted that the JC members from Norway have had considerable scientific experience prior to becoming research administrators.

The JC meets alternately in Norway and South Africa, but uses teleconferences in addition to fulfilling its many demanding functions.

The secretariats comprise two programme co-ordinators, based at the NRF and RCN, respectively, with programme and financial assistance provided within their organizations. The co-ordinators ensure that the main responsibilities of the implementing agencies are fulfilled. The principal roles of the two secretariats are to:

- market/announce the Programme
- process the project proposals
- enter into contracts with beneficiaries
- monitor the progress of projects
- disburse funds to successful applicants under the Programme
- fulfil secretarial and administrative functions for the JC and the Annual Meetings
- act as liaison between the JC and the Annual Meetings
- develop and publish guidelines
- establish and implement a communication strategy.

This decision-making structure seems generally to have worked well for the second phase of the Programme. According to minutes from the meetings and interviews with stakeholders, there appear to have been relatively few conflicts or disagreements concerning the implementation of the Programme that can be traced to the decision-making structure. All parties seem to have been clear about their roles, and about what was expected of each.

Having two board-like structures such as the JC and the Annual Meetings could potentially lead to overlap in decision making if the two Boards did not have distinctive roles. ***The key in this respect has been the Business Plan***, which not only spelt out these roles, but which prescribed in some detail how the Programme was to be implemented. The Business Plan left little room for disagreement.

Given the Programme's funding structure, it is difficult to contemplate obvious alternatives to the "Secretariats–Joint Committee–Annual Meeting" type of structure. The two governments will, according to normal bilateral agreements, require having one arena for joint supervision and management of the Programme — namely, the Annual Meeting. At the same time there is a need for an impartial Programme Board that chooses projects and ensures academic and professional quality. The JC could in theory be made part of the Annual Meeting structure, but one would then lose the "balance of interests" that lies in having the two as semi-independent organs. In fact, in programmes where professional quality is key to achieving results, it can be considered a necessity to have the professional assessment at arm's length from the more political considerations of an Annual Meeting.

To clarify further the decision-making hierarchy in the next phase, the new Business Plan may have to be even more specific about the respective roles to be played by the Annual Meeting and the Joint Committee. A future programme may involve additional stakeholders and have a more complex structure. To monitor and control such a programme successfully, distinct lines of management responsibilities are required. It should for instance be made very clear what decisions a JC can make, and what needs to be referred to the Annual Meeting.

As a final comment, the decision-making structure may be more obvious to those working within it than to those outside it. Several of the questionnaire responses indicate that respondents were uncertain about how the system works — or, as one PI put it, "*Decision-making processes are obscure and NOT transparent*". Whereas projects do not need every last bit of information about all aspects of the Programme, it is generally considered a good idea for the key researchers to understand how decisions relating to their projects are taken.

Thus, for a third phase, ***it is recommended*** that the operational principles be more adequately described in terms of specific systems and procedures, and that this explanation should form part of the initial procedural background.

3.2 Application and Assessment Procedures

These procedures were the only operational area that saw a major change from Phase I to Phase II. First, there was now to be only one major call for proposals, and, second, the system for assessing applications would be streamlined and made less bureaucratic. In the first phase, there were two sets of referees (one in each country), two scientific committees and an overarching JC to select the projects. This proved to be cumbersome, time-consuming and costly, as noted in the External Review of 2005.

In the second phase, there was to be one set of referees — up to 4 with a maximum of 2 from each country — and an expanded JC would make the final selections. The core members of the JC were supplemented with up to 8 scientific advisers from both countries within the agreed thematic focus areas.

There were also other, more mundane changes made to the Phase II procedures, such as use of electronic application forms. All proposals had to be submitted through the RCN website, and not to both the RCN and the NRF as in the first phase. This significantly reduced the bureaucracy involved.

The application and assessment procedures are clearly described in the Business Plan of 2006 and in the Application Guidelines. There are detailed instructions for completing the application form, i.e. what sort of information must be provided regarding the applicant, followed by a detailed description of the project information that is required and in what format. This includes sections describing project objectives and goals, and descriptions of R&D challenges and proposed methodology, timetable, cost plan, funding plan and budget.

In general, *this adjusted Phase II system seems to have worked very well*. While not all projects managed to secure four referees, all proposals had at least two referee assessments. The preliminary ranking was presented to the expanded JC, which supplemented the initial rankings with appraisals and comments from the scientific experts appointed to the committee. Although it is too early at this stage to say anything definite about the ability of this system to choose the right projects, all indications so far are that it has managed to select a solid research portfolio.

What do the users think about the system? In the questionnaire, project leaders were asked to rank, on a scale from 0 (completely inadequate) to 5 (excellent), "*the application and assessment procedures*" (question 9).

The 22 PIs who answered this question gave it an average score of 3.9, or close to a rating of 4 ("very good"). While several investigators gave a maximum score of 5 and averred that everything was very clear, one in particular complained about the assessment taking place "too late".

In conclusion, the streamlined application system applied in Phase II appears to have worked better than the earlier one used for Phase I. The use of joint assessment and selection committees for a Programme that emphasises equal partnerships seems entirely appropriate — and a practice that should be maintained in a possible third phase.

3.3 Mode of Operation: General Procedures.

In addition to the rules and procedures set out in the Business Plan for Phase II, two sets of guidelines were used. These are (1) Programme Guidelines and (2) Application Guidelines. The application guidelines are commented on in 3.2 above.

The Programme Guidelines describe the Programme's goals; the priorities and modalities of co-operation; the types of grants related to the implementation of joint projects; the main beneficiaries; selection criteria; the application process; assessment procedures and decision making; the disbursement and use of funds; and reporting.

This Review finds that both sets of guidelines are reasonably clearly written and logically presented.

The 25 project managers/principal investigators from the two countries who completed the questionnaire circulated as part of this assessment exercise displayed a normally distributed spread in their rating of both the guidelines and rules of procedure — an average of around 4. This means that both guidelines and rules of procedure are perceived as good, but few comments were provided to elaborate on the scores given.

Eligibility criteria are clearly formulated in the two guideline documents. What may appear confusing to applicants is the listing of rather diverse beneficiary categories, selection criteria and Programme objectives, for which no ranking is provided as a guide to applicants. The 23 PIs gave an average score of 4 ("very good"), with the answers distributed equally between 5 and 3.

The tentative conclusion about the procedural guidelines is that in practice there has not been much "procedural meddling" from the Programme in the projects. After the selection process, there was regular reporting according to the normal routines of the RCN and NRF, but otherwise very little in the way of interference with the projects from the Programme administrators. The result is that the projects have been allowed largely to run their own course, provided they reported at least annually to the two secretariats. This clearly suited most of the PIs, as several of them remarked during our interviews.

3.4 Reporting and Key Performance Indicators

The reporting arrangements consist of two layers. *First*, reporting from the projects to the secretariats, following the standard procedures in each country: the Norwegian partners report to the RCN according to RCN guidelines, and the South Africans according to the NRF guidelines. *Second*, the combined secretariat reports to the Annual Meeting once a year, in accordance with the requirements of the Business Plan.

The Business Plan also includes a paragraph (para. 5.1) on Key Performance Indicators (KPIs), which stipulates an annual assessment of the Programme and the projects according to a long list of KPIs (identified in para. 3.3.1 in the Business Plan). These are specified both at the project and at the Programme level.

3.4.1 Reporting

The Business Plan lists a number of issues (para. 5.4.1) that the report to the Annual Meeting is obliged to include, namely

- a description of actual outputs compared to planned outputs
- a brief summary of the use of funds compared to the budget

- an assessment of the efficiency of the Programme
- an explanation of major deviations from plans
- an assessment of problems and risks
- an assessment of the need for adjustments to activity plans
- if feasible: a brief assessment of achievements in relation to purpose.

In addition, the KPI paragraphs in the Business Plan add another layer of indicators on which the Programme and the projects should report.

This apparent desire for very detailed annual reporting cannot be said to have been satisfied in practice — mainly for very good reasons.

First, when the projects themselves do not report according to the required format, the Programme cannot be expected to do so either. This is a logical fallacy in the Business Plan, as one cannot expect each country to keep its own reporting routines and, at the same time, ask for specialised indicators that are not part of these same practices. The RCN, for instance, requires electronic reporting according to a specific format; furthermore, details of student exchanges and redress issues are not demanded. Exacerbating the project reporting challenges is the uneven schedule for delivering reports, which apparently differs between South Africa and Norway. Calibrating and aggregating reports on the same project, but from the different institutions, seems not to have happened at the secretariat level. It is debatable, however, whether or not this would have had much impact on performance if carried out.

Second, the types of results required by the Business Plan are visible only after some time, and seldom on an annual basis as called for. Publications are probably the easiest thing to measure, and the Annual Reports of the 2009 and the 2010 meetings do include statistics for these. Measures of other KPI indicators, such as "R&D capacity building" and "promotion of redress and equity", are much harder to quantify on an annual basis.

This shortcoming is of course familiar to both the secretariats and the JC, and is apparently acknowledged at the annual meetings. Thus, reporting on all the "additional issues" has been postponed to the final report, which will be delivered after the projects are finalized. A key reason has been to spare the researchers the burden of too much regular reporting.

Avoiding undue regular reporting appears to be appreciated by the project managers. In the questionnaire, the same scoring as explained above (0–5, with 5 as excellent) was used for the question on "rating of reporting procedures". The 23 questionnaires that addressed this issue gave an average score of 3.7, which can be considered as good, but 7 respondents returned a score of 3 or less.

The exact reporting requirements seem to be unclear to some, and one South African institution comments that "*there seems to be no formal system for project reporting. Other NRF programmes have annual on-line reporting protocols, but this level of management does not seem to extend to this programme*". To be consistent, this Programme should follow normal NRF procedures, but the above comment indicates that this has not happened. Most of the South African researchers interviewed found the

reporting guidelines unclear. Among the other repeated complaints was criticism of double reporting due to different forms required by the RCN and NRF. A further gripe was that not every project in such a heterogeneous portfolio of projects fits a uniform reporting format equally well.

Some frustration about reporting was expressed at one of the Annual Meetings. In the minutes of the 6th Annual Meeting held on 28 February 2008, the Embassy commented on the challenge of reporting results: "*There is a need to communicate back the results from the various research projects to both the donors and the public,*" followed by suggestions for more detailed reporting.

The concerns about reporting are valid, and need innovative thinking so that they can be addressed adequately in the next phase. There are structural reasons why adequate reporting on results is difficult as an annual exercise, but there are nevertheless straightforward ways to strengthen the communication.

For now, ***recommendations for the next phase include:***

- Do not include unrealistic reporting requirements in the Agreement — and ensure that current systems can support the requirements that are made. One common reporting format is preferable, but is difficult with the “two secretariats–normal routines” structure.
- Avoid undefined performance indicators such as “extent of staff and student exchanges”. This leaves too much to discretion and says little about the efficiency and effectiveness of the Programme.
- Spell out the reporting requirements very clearly in Programme documentation so that every project is explicitly aware of what will be required.
- Require all PIs to report fully against any KPIs in both progress reports and at the end of each project. This requirement must be monitored by the secretariats to ensure consistent and adequate feedback to funders.

3.4.2 Key Performance Indicators

The extensive list of KPIs in the Business Plan has not been used in practice, in either the reporting or the management of the Programme so far. For the same general reasons as explained under “Reporting” in section 3.3.1 above, it has not been found feasible to make regular estimates on the basis of these indicators, on a project or Programme level. Consequently, the KPI list has added nothing to performance monitoring or supervision of progress.

The answers to the questionnaire mostly confirm this impression. The term KPI as applied to the Programme was unknown to many principal investigators, and they found it difficult to give meaningful answers. Those who did returned a relatively modest rating — an average of 3. Only two gave a score of 5, and another two gave it a zero (one-third of those responding to this question gave it a rating of 2). The justification for these low scores varied from one project to another. Several claimed that it would not be possible to report on impact and performance within the 2.5 years’ time span of the project. Two PIs

rated the use of performance indicators zero because they are in general opposed to performance indicators to assess individual research projects.

One respondent wrote: "... [KPI] is management speak which is generally largely unpopular with academics. If the statement is translated into 'were the outputs of the project in line with the specifications and the scale of funding' then it is not unreasonable. It is important to note that the level and purpose of funding provided in bilateral programs is always strictly constrained, and funding bodies should be dissuaded from expecting major outputs from programmes that are not funded for the purpose."

KPIs can work if they are properly designed and accepted as "fair" by those who will be measured by them. The professorial comment above illustrates this point very well. Furthermore, they must be properly integrated into the reporting procedures, including clear scoring guidelines as well as performance expectations.

Unfortunately, KPIs have a tendency to be thrown into business plans without the necessary groundwork and without properly underpinning the project. They then act more as a quality assurance smoke screen, having no or little impact in terms of performance guidance.

The recommendation is thus to use KPIs sparingly, and if one wants to include them, to integrate them into reporting practice in a way that makes the project leaders willing and able to use them as true monitoring tools.

3.5 Financial Procedures

The one administrative issue that appears to have been a continuous headache to both secretariats is financial reporting. As pointed out earlier, the Programme assumed that the NRF and the RCN would manage their respective projects according to existing administrative procedures at each institution. This, however, imposed unavoidable difficulties when finances were to be aggregated at a Programme level. To compound the difficulties, there have been several "money streams":

- Money from the NMFA to the RCN, to be distributed to the Norwegian partner
- Money from the DST to the NRF, to be distributed to the South African partner
- Money from the NMFA to the RCN, to be forwarded to the NRF for distribution to the South African partner. This money was to be accounted for separately from the DST funds to the same project.

In addition, there were unspent funds from Phase I, to be used for activities such as marketing and the impact study. This was to be accounted for separately, but seems to have added to the confusion regarding the money spent on the Programme. As of May 2010, the RCN estimated that about NOK 44.5 million out of the total budget of NOK 48.4 million had been allocated to the Programme.

The system is supposed to work something like this:

1. The funds from the NMFA and DST would be forwarded twice a year to the RCN and NRF, based on an agreed cash flow budget for the year. This budget will have been approved by the Annual Meeting.
2. The NRF and RCN would then disburse the funds to projects according to each of their established procedures. This is where a key problem arises, as the RCN disburses at the start, based on the agreed budget, whereas the NRF disburses against actual claims presented.
3. At the "end" of the year, the RCN and NRF would report on money spent and prepare a new budget for the following year, to start a new round of allocations from the NMFA and DST. A second major problem arises here, as the two countries have different financial years, and different practices for reporting expenses. While the NRF projects require an annual audit of money spent, the RCN stipulates reporting on deviations from budget. In practice, this means that the RCN accounts are only an estimate, whereas the NRF captures actual expenditures. The more demanding auditing requirements for the NRF projects adds to the delays in reporting.
4. At the end of each project, the RCN-funded projects deliver a final account of money spent. There is no separate audit requirement for the project account itself, as that is assumed to be included in the consolidated audit of the agency, which happens every year.

This means that it is a nightmare to compile a combined expenditure report for a given year. There is no common cut-off date for reporting, and the two secretariats actually report different types of figures. Fluctuations in the exchange rate compound the difficulties.

The NRF practice has a further unfortunate consequence in that money is retained in its financial reserves without being disbursed to projects. Funds are received from the NMFA/RCN and DST in accordance with the annual budget, and are allocated to the projects. However, they may not get disbursed immediately as the university involved may be late in claiming for expenses — the NRF requires claims including proof of payment against formal invoices of actual expenditure. Belated accounting at the institution may thus lead to delayed payouts.

While projects seem not to be greatly inconvenienced by this practice — because the university or research institution housing the project pays expenses from its own funds — it seriously complicates Programme budgeting. It can leave a lot of money unspent every year, and there is no way of knowing whether this really represents unspent funds or just a slow university accountant at work. At the beginning of 2010, there was about NOK 7 million unspent at the NRF, which should have been paid out against the budget. Even now, in late 2010, several millions lie unclaimed by South African universities. This problem cannot have come as a surprise to the NRF, which bears substantial responsibility for not distributing the funds by, for instance, pro-active reminders to the projects.

In Norway, expenses and budgets are adjusted every year as each project declares expected deviations — but not actuals — and this leaves less money categorized as "unspent" (about NOK 1.5 million at the end of 2009). The real cost picture will emerge only when the project is finalized.

The secretariats have nevertheless been able to present budgets and accounts at the Annual Meeting, by "fudging" the financial years and by elaborating on details of unspent money and other complications. This undoubtedly has required much work, and has occasionally been difficult to explain both to insiders and outsiders. The Annual Meeting seems now to have become resigned to the inherent complexity of financial reporting, as have the auditors. The latter, on the other hand, aver that there is no problem with the accounting practices in each country — which they trust as providing a satisfactory financial perspective. It is important to emphasize that there have been no doubts expressed regarding the probity of the Programme's financial management.

In our interviews with Norad staff, they asked us to recommend improved ways of financial reporting. That is easier said than done. The question to ask is whether the RCN and the NRF should continue to use their own established funding and accounting practices. If they are, the problem remains of aggregating two sets of accounts that cannot easily be reconciled.

A remedy — but not a solution — to the aggregation issue is for the next phase to describe, explicitly and in technical terms, how the aggregation of budgets and accounts is to happen, given the identified complications. There should perhaps even be a guidebook for the interested non-specialist on how the figures are to be interpreted.

There are two main alternative options for streamlining the accounting:

1. *Use the procedures of one country only*, such that all funding goes through either the NRF or the RCN. In the case of the NRF, Norwegian institutions would then have to follow NRF rules and be paid from South Africa — or vice versa in the case of the RCN being the principal administrator.
2. *Establish a completely new support structure*. This would still require one home country for accounting purposes, but with a separate legal entity (not the RCN or NRF) that is responsible for all funding, payments and accounting. All projects would then adhere to this particular model.

There are both pros and cons to these models, which have to be considered and assessed. Without our knowing the objectives for the possible next phase of the Programme, it is difficult to advise whether such a major administrative reorientation would be worth the trouble. However, what is clear is that the **financial reporting has to be improved** in the next phase. One cannot have a situation where it is not possible to present the Programme's financial status to the major funders, at least once a year, in a manner that is easily understood.

It might be sensible to consider a budget-support type of structure if several different funders were to participate in a Phase III. In such a case, donors would pool money into a single budget for the entire Programme. They would not restrict their funding to specific

projects and would thereby avoid the need, as is the case at present, to track the finances of individual projects. By contrast, it would be a major challenge to report on money spent, to each of the funders, from a split accounting structure like the one that prevailed in Phase II. If the RCN and the NRF are to continue as core administrators, the system must ensure that they do not have to account and report to a multitude of different donors in different ways on different projects within the same Programme.

3.6 Efficiency of the Secretariats

The ToR asks for an assessment of the efficiency of the two secretariats. There are, however, no criteria given in the Business Plan by which to evaluate such efficiency. More specifically, none of the reporting variables referred to above actually measures the operational activities of the secretariats — no quantifiable targets have been given. The Business Plan lists tasks to be performed by the secretariats, however, so the extent to which we can identify that these have been addressed as planned gives some indication of efficiency. A second main source of information is the questionnaire.

The following comments on the perceived efficiency of the funding agencies are representative of written answers to the questionnaire, provided by senior representatives of about one-third of the 27 projects supported in Phase II, as well as from interviews conducted in South Africa.

Researchers were complimentary about the streamlined way in which the Programme is run and consider that the online reporting procedures are not particularly onerous. The efficiency of the operation, and the way it is conducted (in respect of guidelines, rules of procedure, eligibility criteria for submissions, etc.), are generally thought to be at least “adequate” or better: the large majority of researchers indicated “excellent” relations with the RCN (a score of 4 or 5 out of 5), in contrast to about 3 out of 5 for the NRF. There is a welcome lack of red tape (according to one researcher, administration in South Africa “*needs to be simple and easy*” for academics, who do not necessarily have secretarial support to complete the paperwork; and grant-holders generally praised the efficiency of their respective university research offices). In some cases applications had got mislaid (in South Africa) and some researchers experienced delays in the receipt of funding after their projects had been accepted; this can have serious consequences for the recruitment of students.

One important caveat, however, is that the workings of the RCN and NRF depend on several external factors that are not directly connected to the Programme. The resources available to an organization, for instance, may be such that the tasks imposed — indeed, any task — are impossible or difficult to conduct speedily, within the required timeframes.

3.6.1 Research Council of Norway

The Research Council of Norway houses the Norwegian secretariat. Jan M. Haakonsen is the RCN Programme Co-ordinator and has served in this role since Phase I. The RCN is responsible for the disbursement of grants to the Norwegian institutions participating in the Programme, as well as for the allocation to the NRF of the portion of the Norwegian funds allotted to the South African institutions.

The impression from interviews and reports is clearly one of a very efficient RCN: in answer to the questionnaire circulated to all the principal investigators/project leaders in Norway and South Africa, 25 respondents returned an average score of 4.5 for the RCN Programme secretariat in answer to the question: *“On a scale from 0 to 5 (0 being completely inadequate, and 5 excellent) how would you rate the efficiency in performance and service provision of the two secretariats?”*.

Half of the respondents gave a score of 5 and the other half 4. None of the respondents gave a score below 4. This must be interpreted as the PIs being very satisfied with the performance and service provision by the RCN secretariat on the items described in section 3.1.

Among elaborations to justify the scores given, one of the South African professors commented as follows: *“What has been amazing about this project has been the combination of support for the work and the lack of red tape... it seems to me that this project, from both the South African and Norwegian sides, has appreciated the fact that administration needs to be simple and easy to do, which it has been.”*

In the case of the RCN secretariat, the key to this success has come from a combination of staff stability, which has helped to establish a solid and efficient institutional memory of the Programme and how to run it, and the recruitment of a dedicated, hard-working and highly qualified co-ordinator.

3.6.2 National Research Foundation

In South Africa the NRF performs three principal, long-established functions, which operated during Phase I of the Programme and which are common to its other bilateral programmes. These are: (1) negotiating contracts and agreements and providing the South African secretariat (the responsibility of the International Relations & Cooperation Directorate [IR&C]); (2) handling their side of the finances; and (3) maintaining records of funding disbursements and managing the online reporting from and to the grant-holders (the responsibility of the Grant Management & Systems Administration [GMSA]). The secretariat in Pretoria finds communication with its counterparts in Norway to be particularly efficient — *“We understand each other, and we speak with one voice”*. For their part, the Norwegians acknowledge that the NRF values the Programme, is accessible, and actively participates in professional meetings.

The systems and procedures followed by the IR&C and the GMSA are clearly set out in detailed rules of procedure. However, the division of labour between the two manifests itself in a lack of direct communication in important respects (for example, we found that

the IR&C personnel did not have immediate access to researchers' progress reports [although these have only to be asked for], which are held on the GMSA's database). To overcome this gap in future, as a first step, the GMSA intends to provide direct electronic access to its files to other divisions of the NRF, including the IR&C, with the South Africa–Norway Programme being given priority.

The IR&C informs us further that to simplify the disbursement of grants it is currently attempting to return to the former manner of the release of funds, namely, staggered percentage disbursements over the lifetime of the cycle of the call (2, 3 or 4 years), with the final payment withheld until submission of final research and audit reports. The hope is to implement such a scheme in time for a new funding cycle if there should be one. This would bring the system closer to the RCN practice, and would be good news for those who will have to consolidate the two sets of accounts.

The IR&C is also concerned that progress and annual reports submitted under the Programme have largely been left “to live a life on the shelf of the GMSA”. There is no inherent reason for the secretariat to allow this situation to persist.

However, the relatively high turnover of staff, either because personnel have left the organization or have moved to other divisions, has created some lack of efficiency in the agency (this was also commented on in the 2005 review of Phase I). The rather fluid staff situation reduces institutional memory and has come to mean that appreciation of the significance of the research being conducted by the grant-holders can be superficial and therefore insufficient in servicing a “flagship” Programme fully (“*they could have got more interested [in our work]*” and “*no obvious interest displayed*” were two impressions that we recorded).

To give the research outputs of the projects, as indicated in the progress and final reports, the wider recognition and standing that they deserve, the IR&C declares that “*it is our stated intention that these reports, plus such published scientific and popular outputs as may be generated within the projects, will be outsourced to a reputable company for appropriate and effective dissemination purposes*”.

In the above, we have painted a picture with a broad brush, and possibly have stretched the limits of our terms of reference in regard to commenting on the administration of Phase II. In the following paragraphs, we narrow the focus and elaborate on some specifics of operational practices.

As noted under the section on reporting procedures, both of annual progress and at the end of Phase II, projects follow the standard NRF practices (and format) used by the GMSA. On the whole, the requirement to report only once a year is seen by grant-holders as relatively undemanding and therefore welcome.

The particular problem of using only one format, which follows a standard template that may not necessarily capture important subtleties of a specific project, can apparently be solved. The GMSA informed us that it is possible, and indeed desirable, to customize the reporting forms so as to monitor progress in terms that satisfy the specific needs of the funders and the Programme. There is in fact no need to use simply the standard templates

as happens at present — they can be easily redesigned to be able to gather supplementary information in addition to the traditional reporting practices.

Whether the RCN can do the same is less certain, but one might foresee a situation where the South African partner is responsible for reporting on a particular project, with the Norwegian providing input, while the Norwegian partner adheres in addition to the standard RCN procedures.

Project-specific reporting should take into account the particular requirements and nature of the work involved, as well as the objectives of the funding agencies. For example, it would be possible for assessment purposes to ask PIs to report specifically on such matters as the novelty and significance of their work, their principal outcomes, the policy implications of their results, the supervision of students from historically disadvantaged groups, and how they have dealt with the requirement of achieving redress. Not all of these issues are directly addressed or answered in the standard reporting forms currently used.

As a final comment on the brink of the introduction of a new phase for this Programme, we consider it crucial that NRF be strengthened to perform those functions for which it would be responsible if it is to succeed in playing a core administrative role in the future. The likely increased complexity of that Programme will place additional burdens on the capacity of the NRF's secretariat. The cracks in administrative efficiency observed in Phase II risk being further widened if the organization is not visibly and effectively strengthened. This should involve, for instance, integration of the key functions of the IR&C and GMSA to the degree that communication and interaction are seamless.

Recommendations include the following:

- Strengthen the NRF secretariat to enable it to become more appreciative of the scientific work of the grant-holders, through the appointment of staff of sufficient seniority, knowledge and experience. The need for this is recognized by the executive director of IR&C, who is pursuing this possibility with the NRF executive and senior personnel at the DST.
- Generally improve and strengthen the NRF's ability to administer such a Programme in a timely and efficient way.
- Customize online reporting procedures.
- Spell out clearly the tasks to be performed by the secretariats, as well as the specific implementation systems and procedures to be followed, including indicators for performance — such as, for instance, that “all projects have received their allotted funds within a certain time”, etc.

4 Effectiveness

The ToR specifically requires an assessment of effectiveness in relation to certain objectives. These are commented on below. It is perhaps useful to reiterate that the projects have not yet come to an end, so at best the results to hand are partial or based on impressions. As already mentioned, regular reporting on results has been limited, with the projects expected to respond in detail on the broad range of objectives only in their final report. Furthermore, given the absence of the planned impact study, we have regrettably few hard facts to use in our assessment of effectiveness.

Our conclusions are therefore tentative — we give indications but in many respects we lack certainty or the ability to elaborate.

4.1 Academic Excellence

It is unfortunate that the expected impact assessment is not yet available (it had not even been started at the time of writing, so that scientometric data were not available, for example). We are therefore able to give only broad impressions of the progress and quality of the research projects conducted in Phase II and their outcomes to date (September 2010).

A total of 27 projects was selected from some 82 applications for funding in Phase II. Among those chosen, most of which are conducted in South Africa: 8 are concerned with medical or socio-medical topics (especially HIV/AIDS and TB in poor rural communities), 4 address environmental pollution, and 5 relate broadly to marine science (including aspects of oceanography and climate change).

Research partners in Norway were chosen principally on the basis of established networks or a history of working with their South African counterparts (these professional relationships were sometimes begun even before or during Phase I). Those PIs interviewed made it clear that these were viewed as partnerships of equals — this is not an aid programme; the Norwegians in some cases are among the leaders in their fields and bring expertise not available in South Africa, or else they can provide equipment or analytical support to complement work in South Africa. Moreover, the African connections of some Norwegian grant-holders have allowed South African researchers to extend their reach elsewhere on the continent.

The leader of one of the most productive and eminent research centres in South Africa commented that “*we send only our best students to Norway*”. A feature of the Programme has been to expose young students to international science. Moreover, some PIs declared that their projects had been unusually productive over a relatively short time for relatively little funding, compared with their experience of other bilateral partnerships.

Aside from the senior researchers and their students, and the respective research communities, the potential beneficiaries of the joint projects further down the line include impoverished rural and urban people burdened by disease (especially HIV/AIDS). It is evident that the outcomes of some projects are intended to have clear implications for policy initiatives at a national level — for instance, in regard to health, the management of natural resources, and socio-economic issues — although it is not yet evident to us to what extent the potential for addressing policy-makers has been realized.

A measure of the potential sustainability of the programme is indicated by the unanimous opinion that those researchers we interviewed wished to continue with the Norwegian connection should this prove possible (in a Phase III, for example). In addition, a sustaining benefit of the Programme is that it has proved possible for PIs in South Africa to leverage further funding, including large grants from, or participation in, the European Union's FP7, which in more than one case will involve other African countries.

4.2 Intended Beneficiaries

Chapter 2.4 in the Business Plan for Phase II states that the Programme's main beneficiaries will be:

- Researchers, postdoctoral candidates and postgraduates (master's and PhD students)
- Young researchers from historically disadvantaged backgrounds in South Africa
- Women researchers.

The Business Plan does not provide any guidance as to how to rank these three groups in the project selection process when available funds are a limiting factor.

The selection criteria presented in chapter 2.3.4 in the Business Plan list five categories as follows:

- Scientific quality in relation to the research standards currently applicable within the disciplinary field
- Relevance in relation to the objectives and prioritized areas of the Programme
- Qualifications and/or experience of the research teams involved
- Contribution to capacity and competency building (redress), especially related to young researchers from historically disadvantaged groups in South Africa, and female researchers in both countries
- Cost-effectiveness.

These criteria are of only limited assistance for our purpose. Without providing any clue as to which among the five selection criteria ranks highest — or any order of ranking among the categories — these criteria provide no help in ranking the intended beneficiaries, except for a budget limitation attached to cost-effectiveness, and the fact that applications must be for research within the (rather wide) prioritized areas of the

Programme. What is beyond doubt is that the researchers and research assistants involved from both countries in the 27 Phase II projects are intended beneficiaries.

Even when we interrogate the key performance indicators listed in section 3.3.1 of the Business Plan, the above ambiguities remain, and leave a great deal up to the JC in weighing the different objectives against each other. These indicators also include measures of both scientific excellence and of social redress and equity, with no clue as to how to rank these in relation to each other.

The composition of the JC, however, and its expansion to include eminent scientists for reviewing and ranking proposals, suggest that scientific excellence ranks highest, and that if the JC does not find a proposal satisfactory on the basis of scientific criteria, it will not be accepted. Interviews with JC members and responses from project leaders confirm that this is what is being practised.

Indeed, the Annual Report to the 6th Annual Meeting says this explicitly. First, proposals were graded and ranked based on scientific merit by the whole JC. Then proposals were considered in light of their potential for redress and capacity building. In cases where several proposals had received similar scientific rankings, some proposals were prioritised based on their potential for redress.

The Programme outcomes presented in the Annual Reports strengthen the impression of a strong scientific programme (see Table 1 below).

Table 1: Programme Outcomes 2008 and 2009

<i>Outcomes</i>	<i>2008</i>	<i>2009</i>
PhDs granted	1	0
Articles in refereed journals	28	28
Non-refereed journal articles	3	10
Public dissemination of research findings; other reports/lectures etc.	27	91
Books/Monographs	n.a.	7
New processes	n.a.	1
Reporting in mass media	n.a.	1
Published lectures in international fora	n.a.	21
New companies established	n.a.	2
New analytical tools/prototypes	n.a.	2

Source: RCN Årsrapporter 2008 and 2009. n.a., not available.

The progress indicated between 2008 and 2009 is what one would expect because (1) projects take time to complete and report on, and (2) the lead times between journal submission and publication can be years.

Has the emphasis on scientific quality in any way impaired the Programme objectives regarding redress and capacity building — should other projects have been chosen instead with a higher content of redress and capacity building? Perhaps, but it is hard to weigh these sets of objectives against each other. Further, it implies a different type of programme of a more development orientated nature with a different type of relationship

between the Norwegian and the South African institutions. It would not be based on the parity of competence and interests to the same degree as in the current Programme.

Not surprisingly, the impression of an equal partnership is one of the recurring reasons why this Programme is perceived as "*great*" among the current participants. It is also a clearly articulated objective from policymakers in both countries. Given this rationale for the Programme, we find it difficult to fault the selection criteria and process.

Data from the Norwegian Institute for Studies in Innovation, Research and Education (NIFU/STEP) show a clear increase in the number of papers and articles co-authored by South African and Norwegian researchers during the 2005–2008 period. Indeed, South Africa is among the countries that score highest on the Norwegian cross-border research cooperation index; that is, Norway and South Africa have published joint articles to a greater degree than Norway has with many other nations. It is, however, not possible to quantify the contribution that this particular Programme has made to the research cooperation index.

This Review has also observed that, since Phase I, the proportion of female researchers in the Programme has increased — from 9 out of 40 principal investigators/project leaders in Phase I, to 9 out of 27 in Phase II on the Norwegian side; and from 8 out of 40 to 6 out of 27 on the South African side.

The available data do not indicate how many female person-months (principal as well as other researchers and research assistants) of research there is in the Programme on each side relative to total research months in Phases I and II.

There are preliminary reports (but no hard numbers) on the involvement of researchers and research students from historically underprivileged groups, which indicate that their proportion will also be higher in Phase II than it was in Phase I.

As regards the intention and actual success in recruiting young researchers from historically disadvantaged backgrounds in South Africa, the ability to do so varies by field of research. However, all PIs interviewed declared a concerted effort to find, recruit and retain such students in the Programme and beyond, but complained that it is very difficult to retain such talented students since they are offered much better paid jobs in the private sector. Students from historically disadvantaged backgrounds tend to stay with the Programme projects for a limited period as undergraduates only.

The 25 principal researchers who responded to question 2 in the circulated questionnaire all listed the intended key beneficiaries of their respective projects. ***Our conclusion is that the projects cover a wide and heterogeneous range of beneficiaries, from HIV/AIDS victims, impoverished rural dwellers and fishing communities, to public administrators, political decision-makers and the research community.***

4.3 Historically Disadvantaged Groups

There was a greater emphasis on capacity building and redress in Phase II than in Phase I. As noted above, however, there are no firm numbers on exactly how successful the projects have been in involving students, researchers and other stakeholders from historically disadvantaged groups (HDGs).

The impression from interviews and from the questionnaire, nevertheless, is of project leaders who take the issue seriously. In some projects, in particular those involving formerly disadvantaged universities, a substantial number of students from HDGs are engaged. For instance, in the marine science project at the University of the Western Cape that recently had an article published in *Science*, all 8 master's students are from disadvantaged backgrounds. In other projects, however, 3 or 4 HDG students may have started master's or doctoral studies but had all left within the first year. It is then difficult for a project to start anew, and to introduce new students into an already ongoing programme. The issues to be faced with these students, therefore, are, first, initial engagement, and then retention.

Recruiting students from previously disadvantaged groups is a major problem in some disciplines and sectors in particular (this was commented on in the review of Phase I and is an enduring concern in higher education in South Africa), but also for reasons that reflect the legacy of apartheid.

The challenges are by now well known. It is hard to recruit black master's and doctoral students to certain sectors and some topical fields, compounded through insufficient bursaries and top-ups to compensate for generous employment opportunities open to them in the public and private sectors. Their academic skills may lag behind those of other students, so they require more time for supervision; some potential students simply "*have little interest in the research we do*"; others leave after a master's degree in search of a salary. Moreover, to attract people from HDGs as full-time researchers/PhD students, there must be a critical mass of people available with a master's degree in relevant subjects. In many fields, South Africa does not yet possess this critical mass.

Some of the respondents to the questionnaire emphasized the issue differently. One wrote that "*At present in SA, there are vastly more research student bursaries available than good students to accept them (particularly at PhD level). Experience informs us that giving research studentships to students who do not have the capacity to undertake research (as indicated by undergraduate and early post-graduate performance) is rarely cost efficient. Increasing the pool of good postgraduate researchers, particularly derived from the poorer and more remote sectors of the community, is fundamentally dependent on national economic development, including substantially improved primary and secondary education.*"

In the absence of the impact study, we do not know how the total experience from this Programme will measure up with regard to HDGs. However, to turn the focus from problems to possibilities, our interviews and the responses to the questionnaires have led to a number of recommendations as to how the HDGs can be involved even further in the

next phase of the Programme. These **recommendations** include the following, in no particular order.

- Provide more generous scholarships and bursaries.
- Support for HDG students through to a PhD should be considered a priority, because that will enable them to secure academic positions at university — where they will be great role models for others.
- Improve salaries by external funding, to accommodate newly qualified scientists on an intern/contract basis.
- Develop multidisciplinary projects with a closely knit international group of senior scientists and students, to create a sustainable and committed joint research environment.
- Actively encourage projects to take on HDGs, and introduce a financial incentive contingent on these students finishing their degrees.
- Market historically black universities, including "road shows" to illustrate project work and opportunities for postgraduate work.
- Offer sandwich courses for master's and PhD students, through exchange programmes between Norway and South Africa.
- Introduce a full two-year master's and then a three-year PhD programme funded by the project, which will give students attractive future prospects.
- Encourage students at lower levels (undergraduates, for example) to get involved in project work, so as to stimulate early interest in different fields of research.

4.4 Lasting Relationships?

Another principal objective of the Programme is to build sustainable cooperation and long-term research collaboration beyond the end of the current phase. Has the Programme established a solid foundation for maturing and extending the capacities and competencies of its participants?

It needs to be remembered that lasting relationships depend on factors outside the scope of this Programme. Continuing collaboration among faculties and researchers depends on sustained professional and financial incentives, in the face of alternatives. For some, it may be that cooperation with, for instance, a German university would be the sensible way to take the research further, with other partnerships.

This is perfectly acceptable, and a sign of a healthy and vibrant research community. One would certainly not wish to subsidise research partnerships that grow stale. Whereas we would like to see continued collaboration between institutions in South Africa and Norway for the sake of bilateral relations, a partnership that ends (perhaps only temporarily) is not necessarily a sign of failure, in our opinion.

The responses from researchers in Phase II, however, are overwhelmingly in favour of continuing their partnerships. While the funding that binds them may play a role, the

money involved is actually quite limited, and is apparently not the main reason for people wanting to extend their collaboration. Our impression is rather that a good number of the research institutions have not only found themes of true common interest, but have built up working relationships that appeal to them. The expressions of mutual trust and respect between the parties are clearer and more common than one might normally expect.

We hope that the impact study will tell this story in more detail, but our tentative conclusion is that the two phases of this research programme have created an excellent foundation for continued research collaboration between institutions from the two countries.

There is also an additional interpretation of the objective of sustainability, namely that the project is able to integrate students in a way that expands knowledge and ensures the sustainability of the professional capacity built through the research. With few exceptions, all projects involve students doing a master's or a PhD. Although we cannot guarantee that these young scientists will continue their academic pursuits in the future, we are confident that the knowledge they have gained will be put to good use.

This too is an issue that is contingent on other factors, such as the level of faculty funding at each university — priorities change and it is the privilege of any university to decide where resources are to be used. For underfunded units this may be a real problem, and at least one of the questionnaire respondents complained about "*piecemeal funding*" that makes it hard to sustain the expertise developed. Another proposed that a modest amount of money should be earmarked for post-project work, to identify new sources of funds or new areas of collaboration.

Does this mean that a programme such as this should support only projects at institutions with sufficiently strong finances — or a high likelihood of attracting new money — to guarantee continued funding of a particular subject? If the sustainability criterion is taken literally, that would be the logical outcome. It would, however, exclude many of the former disadvantaged South African institutions, as these tend to be the ones with the most precarious finances. New fields of study and upcoming, innovative research milieus might also risk being excluded. Nevertheless, it is preferable to support projects that do not close down as soon as Programme funding ends. A balance needs to be struck here, and ***we recommend discussing the pros and cons of the sustainability objective in more practical detail as part of the preparations for the next phase.***

4.5 Promotion and Dissemination

The two governments are understandably keen to promote the achievements of the Programme, project by project and as a whole, to demonstrate the strategic relationship between the two countries in science, to internationalize the work as much as possible, to translate the outcomes of academic research into policy advice for the civil authorities where appropriate, and to feed applicable outcomes into the innovation chain that leads to commercialization.

The groups we encountered are clearly motivated to produce the expected outcomes of good research — publications in leading peer-reviewed journals, occasional books, presentations at national and international conferences, workshops and booklets for non-academics, and in some cases creation of a dedicated website.

The 25 completed questionnaires inform this review team of the promotion and dissemination efforts and achievements of the respective projects. It appears that virtually every traditional channel of dissemination has been used. All of the projects report submission of — and acceptance of — one or more papers by top international peer-reviewed journals. Articles are awaiting a publishing decision, as is to be expected in view of the typically long lead times before acceptance.

In addition, papers have been published in conference proceedings following presentations at national and international meetings. Project researchers have had their work accepted as book chapters. And in some cases the project has resulted in, or will eventually be published as, a book.

A handsome, hardcover volume was published by the NRF to celebrate the achievements of the range of Phase I projects. Around that time the 3rd Annual Meeting of the JC alerted the funding agencies to the need for a communication strategy including, for example, a dedicated website. This has not been followed up.

Some of the research is of a basic nature, and therefore dissemination to a wider popular audience is not relevant or appropriate, while other projects under the Programme are of an applied nature, and often have direct policy relevance. The latter projects typically generate popular articles, press releases, movies, TV programmes and interviews, and DVDs for circulation among stakeholders and decision-makers. In such cases the research outcomes are presented as part of awareness-raising campaigns to local stakeholders (farmers, fishing communities and disadvantaged groups of various kinds) as well as to decision-makers in local and national government.

Several of the applied research projects disseminate their findings by means of their networks using online distribution and websites.

In the summer of 2009, an additional grant allocation was made available from the Programme for the purpose of enabling projects to communicate and disseminate the research results more widely. Many of the projects took advantage of this opportunity. The funding was variously and selectively used to hold writing workshops to boost publications and increase training capacity, to issue or work on a book, to attend scientific meetings, and to populate websites more attractively.

In a few cases these additional funds helped to upgrade the postgraduate studies of historically disadvantaged students (including a woman researcher) from MSc to PhD. No doubt these activities will be reflected in the forthcoming impact assessment.

Sixteen of the 23 participating projects report that they applied for and received such additional funding, while seven declared that they did not apply.

However, it is a tall order for even a gifted scholar to take on the task of publicizing and exploiting specialist research for a wider audience in addition to other academic responsibilities, although this has happened in some cases during Phase II. Realizing the full potential of the outcomes of these 27 projects, individually and collectively, requires different skills, resources and a wider perspective than has been readily available.

In conclusion, the highly heterogeneous portfolio of research projects funded by this Programme does not lend itself to a uniform format of promotion and dissemination of outcomes and findings. The current approach, which has left it to each project to choose how to promote and communicate (except for the obligatory reporting to the funding agencies), appears to have worked well for Phases I and II.

Recommendations

Phase II is coming to an end, so the following suggestions would be appropriate principally to its extension as a Phase III Programme, should this come about.

- If a Phase III is approved with a narrower focus on environmental and climate change topics – and especially if the projects in these fields are to have direct policy relevance – then a need is likely to arise for a more coordinated and perhaps centralized approach to communication, promotion and dissemination.
- Better-resourced secretariats, with their bird’s-eye view of all the projects and their networks, should take responsibility for creating and implementing an inclusive communications and marketing strategy for the Programme as a whole (with outsourced assistance where in-house capacity is not available).
- Such a strategy, implemented via a suite of mutually agreed KPIs, will require close monitoring by the secretariats as well as scientific appreciation of the various projects and their achievements.
- The individual grant-holders should be given the resources and support to promote their work to a wider audience and thereby be helped to meet a major objective of the Programme.
- A system of regular briefings, informing the principal funding agencies of both countries about the novelty and significance of the research and its implications, would help to keep them abreast of the broader impact and value of the Programme.
- A deliberate effort should be made also to keep grant-holders fully aware of the work and achievements of the other projects supported by the Programme, to facilitate potential collaboration that might otherwise be overlooked.

Annexure A Terms of Reference

Review of the South Africa–Norway Programme on Research Co-operation – Phase II

1. Background

In 2001 it was decided to set up a programme to support projects carried out in partnership between South African and Norwegian researchers. The aim of the *South Africa–Norway Programme on Research Co-operation* is to promote excellence and quality in research in fields of mutual concern and relevance. The rationale was the notion that the two countries have matching capacity and quality in research, thus cooperation between the research communities in two countries benefits from equal partnerships and mutual advantages joining research efforts. A Business Plan was prepared and signed in Pretoria on 22 November 2001, and a first joint call for proposals launched in 2002. Originally, the programme was scheduled for the period 2001 – 2004, but due to the late signing of the Business Plan it was extended to 2005 and later into 2006 to allow for all funded projects to be completed.

In 2005, an external review of the programme was undertaken. The review was very positive regarding the achievements of the programme and once funding for a second phase was secured, preparations for an extension of the programme commenced. A Business Plan for Phase II (2006-2010) was signed in May 2006 committing the Norwegian government to a contribution of up to NOK 40 million and the Department of Science & Technology (DST) to a minimum of ZAR 9 million for the funding of collaborative research projects (appendix 1). In addition to this amount the South African government contributes to the running costs from the South African side and a total of R701 000 for a project unilaterally funded from the South African side.

The Phase II call was launched on 15 June 2006, with application deadline set for 12 October and funding to commence in April 2007. In accordance to the Business Plan, there has been only one major call for the stated programme period.

The second phase of the programme was originally planned to end on 31 March 2010. Due to delays in the start-up and implementation of some of the projects and the fact that two additional top-off calls were made in 2009 (additional student support and dissemination), it has been agreed to extend the programme period to 30 September 2010.

The second phase of the South Africa–Norway Programme on Research Co-operation has continued to trigger much interest in the two countries' research communities. A total of 82 applications were submitted to the only call for proposals announced in June 2006.

The structure of the programme was similar to that of the first phase, with similar priority areas, objectives, intended beneficiaries and application procedures. The Research Council of Norway (RCN) and the National Research Foundation (NRF) were once again designated as the implementing agencies of the programme. The major change in the second phase has probably been the assessment procedures that were simplified compared to those in phase one, in line with the recommendations of the external review. 27 projects were selected for funding, covering all eight priority areas. The participating researchers represent 13 research institutions in each country.

In 2009, a number of bilateral discussions were held between Norwegian and South African authorities on the future of research cooperation between the two countries. These were partly conducted on a ministerial level as a follow-up of the 2002 state-to-state agreement on scientific and technological cooperation. Norway's minister of research and higher education, Ms Tora Aasland visited South Africa twice, the second time as part of the State visit of the King of Norway. Research and higher education was high on the agenda during this visit, and the Queen, among other things, was the main speaker at the joint opening of two seminars on research cooperation and higher education in Cape Town.

Both countries have strongly indicated an interest in continuing a formalised cooperation in research, though thematically more restricted than during the present programme. Research on the environment and climate change are prioritised areas in both countries, and any future research cooperation programme will most likely be concentrated in this thematic field. The Norwegian Ministry of Foreign Affairs has indicated that it may be in the position to provide funding to research cooperation in this thematic field in the future. Climate change and environment research was also the theme of the seminar opened by the Queen during the State visit.

In the aftermath of the seminar, it was agreed to undertake an external review of the present phase of the research cooperation programme under the RSA-3016 agreement to provide further background to assess the modalities and structure for an extension of the S & T cooperation programme between the two countries. A separate impact assessment is under way as a separate initiative, thus it was proposed that an external review be undertaken to assess the administrative arrangements under the present programme. In December 2009, the Embassy of Norway requested Norad to organize and undertake such a review with the aid of external consultants.

2. Objective

The objective of the review is to provide an independent assessment of the administrative organization of the bilateral programme on research cooperation between South Africa and Norway.

3. The scope of the review

The scope of the review is

1) Assess the effectiveness of the *South Africa–Norway Programme on Research Co-operation* in relation to:

- a) the assessment and selection process of research proposals submitted to the programme in order that grants are awarded to the best projects in terms of
 - academic excellence and quality
 - intended beneficiaries
 - the promotion and dissemination of research findings
- b) the improvement of research capacity in South Africa in terms of the programmes impact on granting access and promoting young scientist/researchers from historically disadvantaged groups.

2) Assess management and transparency in relation to:

- a) the efficiency of the two implementing agencies
- b) the mode of operation of the programme formulated in guidelines, rules of procedures, eligibility criteria and financing levels.
- c) the application and assessment procedures, decision-making processes, funding reporting and follow-up procedure of programme beneficiaries.
- d) reporting procedures and the use of key performance indicators as a basis for evidence based management and impact analysis.

4. Working Methods

In undertaking the tasks listed above, the reviewers shall employ the following methodology, to which they are invited to add complementing elements that might be of interest; review of completion and progress reports, document studies, in-depth interviews and consultations with stakeholders. As minimum the reviewers shall collect relevant information from the following personnel and sources

- All relevant agreements and correspondence between the parties to the Business Plan, minutes from Annual Meetings, the proceedings, guidelines, rules of procedure and relevant documentation of the Joint Committee and the implementing agencies including progress and the project completion reports
- Relevant personnel at Norwegian Embassy in Pretoria, Norad, the South African Department of Science and Technology (DST), the Department of Higher Education and Training (DOHET), the Norwegian Ministry of Research and Education (MER), the National Research Foundation (NRF) and the Research Council of Norway (RCN).
- Members of the Joint Committee, a representative selection of the members forming part of the advisory committees/panels, a fair amount of project coordinators and project beneficiaries, including researchers from formerly disadvantaged groups.

- All completion reports and a fair amount of progress reports from the projects not yet terminated.

5. Organization and requirements of the task team/consultants

The review will be undertaken by a panel of two expert consultants, preferably one international expert responsible for the assignment and one local South African expert.

Norad is responsible for selecting the consultant team and enter contractual agreements and will function as a back-stopper for the review and secure and facilitate communication with the signatories to the Business Plan when needed.

The experts shall be selected according to the following criteria:

- the independence and disinterest of the experts
- academic merits, experience and the relevance of endeavours
- familiarity with either South African or Norwegian research
- availability
- price

In addition that team of experts should include the following qualifications and experience:

- experience from evaluations/ reviews of international programmes involving research, research cooperation or science and technology
- experience from research panels/committees appointed by research councils
- knowledge of result based reporting

As the report will be used to consider administrative modalities in a possible future research cooperation programme within environment and climate change, consultants with familiarity and experience within these thematic areas will be preferred.

5. Outputs/products and further use of the review

- an inception report of not more than 5 pages
- a final report presenting the review, conclusions and recommendations in line with the objective and scope outlined above.
- a presentation of the results of the review in a relevant forum

The recommendations from the report shall be taken into consideration in order to:

- assess the effectiveness, outcome and impact of the programme
- improve the visibility of scientific results from the programme
- make proposals for the organization of a new or third phase programme cooperation programme on climate and environment
- make adjustments to application, assessment and management procedures to the present model should a similar set-up be adopted in a future
- suggest a revised system of key performance indicators that can be used as a basis for an evidence based monitoring and management of the programme

7. Timelines

The work plan of the review shall not exceed a total of 6 working weeks divided between the two consultants and spread tentatively over the period May-June 2010.

The inception report shall be presented to Norad not more than 2 weeks after the contact has been signed.

The final report shall tentatively be completed by 15 July 2010.

Annexure B People Met

Renfrew Christie	Professor, Dean of Research, University of Western Cape
Mark Gibbons	Professor, University of Western Cape
D.C. Swaart	Professor, University of Western Cape
Mykhaylo Lototskyy	Professor, Faculty of Natural Science, University of Western Cape
Mario Williams	PhD Res., Advanced Materials Chemistry, University of Western Cape
Leslie Swartz	Professor, Psychology Department, Stellenbosch University
S.L. Chown	Professor, Centre for Invasion Biology, Stellenbosch University
Peter Jacobs	Chief Research Specialist, Centre for Poverty, Employment and Growth
F Danie Auret	Professor, Department of Physics, University of Pretoria
Khaya Sishuba	Director, Bilateral Relations, DST
Lorraine Ngwenya	Deputy Director, Bilateral Relations, DST
Albert Van Jaarsveld	President & CEO, NRF
Robert Kriger	Executive Director, NRF
Ethel Masihleho	Programme Director, STAF, NRF
Tebogo Mokoma	Programme Officer, STAF, NRF
Jimmy Raven	Grant Director, International Research Grants, NRF
Stephen Dhlamini,	Director, Grant Management & Systems Administration, NRF
Margaret Mokhuane	Programme Officer, Norwegian Embassy RSA
Stein Nesvåg	First Secretary, Norwegian Embassy RSA
Jesper Simonsen	Director, Research Council of Norway
Jan Haakonsen	Special Advisor, Research Council of Norway
Lise Frøseth	Advisor, Research Council of Norway
Tove Kvil	Senior Advisor, Norad

Annexure C The Questionnaire

REVIEW OF THE SOUTH AFRICA – NORWAY PROGRAMME ON RESEARCH COOPERATION – PHASE II. QUESTIONS TO PRINCIPAL INVESTIGATORS/PROJECT LEADERS

Background

This review is an assessment of the administrative organization of this research cooperation programme. Nordic Consulting Group AS, Oslo, Norway, has been contracted to carry out this independent review. The scope of the review is to:

- 1) Assess its effectiveness in relation to:
 - a) The assessment and selection process of research proposals in terms of (i) academic excellence and quality, (ii) intended beneficiaries, and (iii) the promotion and dissemination of research findings, and
 - b) the improvement of research capacity in South Africa in terms of the programme impact on granting access and promoting young scientist researchers from historically disadvantaged groups.
- 2) Assess management and transparency in relation to:
 - a) the efficiency of the two implementing agencies;
 - b) the mode of operation of the programme formulated in guidelines, rules of procedures, eligibility criteria and financing levels;
 - c) the application and assessment procedures, decision-making processes, funding reporting and follow-up procedure of programme beneficiaries;
 - d) reporting procedures and the use of key performance indicators as a basis for evidence based management and impact analysis.

Since you are principal investigator of one of the selected 27 projects funded under this programme, we would like your feedback (supplementary to and more detailed than what appears in the project catalogue of the programme) on a few questions related to the above. This is meant to be a brief survey and focused on key issues.

All questionnaires will be handled confidentially.

Please fill in your answers following the questions in the following:

Q1: Please explain on what basis your South African / Norwegian partner institution was selected;

Q2: Please identify the intended key beneficiaries of the research results

Q3: Please describe your approach/strategy for promotion and disseminating the research findings to potential users and stakeholders (e.g. decision makers who have the authority to act so that the findings are put to use for the intended beneficiaries)

Q4: Last summer an additional grant was allocated by the programme for communication and dissemination of the research results and how that could benefit intended beneficiaries. If your project received such funding, please describe how these funds have been/or are planned to be used.

Q5: Please describe how your project involves South African students/young scientists/researchers from historically disadvantaged groups. In particular, it is interesting to learn how these were identified and recruited.

Q6: How can the participation from these historically disadvantaged groups be increased further?

Q7: On a scale from 0 to 5 (0 being “completely inadequate”, and 5 “excellent”) how would you rate the efficiency in performance and service provision of the two secretariats, i.e.

- The Research Council of Norway (RCN):

- The National Research Foundation of South Africa (NRF):

You may elaborate your ratings here:

Q8: On a scale from 0 to 5 (0 being “completely inadequate”, and 5 “excellent”) how would you rate the mode of operation of the programme formulated in

- (i) guidelines,
- (ii) rules of procedures,
- (iii) eligibility criteria and
- (iv) financing levels.

You may elaborate your ratings here:

Q9: On a scale from 0 to 5 (0 being “completely inadequate”, and 5 “excellent”) how would you rate

- (i) the application and assessment procedures,
- (ii) decision-making processes,
- (iii) funding reporting and,
- (iv) follow-up procedure of programme beneficiaries.

You may elaborate your ratings here:

Q10: On a scale from 0 to 5 (0 being “completely inadequate”, and 5 “excellent”) how would you rate

- (i) reporting procedures and,
- (ii) the use of key performance indicators as a basis for evidence based management and impact analysis.

You may elaborate your ratings here:

Q11: Describe briefly the novelty and significance of your principal research findings.

Q12: Indicate the two or three most important outcomes of your research, e.g. published articles, books, patents, etc.