



# FINAL REPORT

## Executive Summary

### MID-TERM REVIEW

### RURAL CAMPUSES CONNECTION PROJECT PHASE II

Connecting (mainly) rural campuses supported by capacity development	

**Submitted to:**

**Universities South Africa (USAf)**

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# EXECUTIVE SUMMARY

## Background and Context

### The need for rural Campus connections

Connecting rural campuses of public universities to the South African National Research Network (SANReN), is critical in bridging the digital divide between rural and metro based institutions.

### Project history

The Rural Campuses Connection Project Phase I (RCCP I) was implemented over the period October 2010 to March 2014 with the objective of improving broadband connectivity to priority rural university campuses to the South African National Research Network (SANReN). The Department of Higher Education and Training (DHET) provided a grant of R28 million for this project. RCCP I connected 22 sites to the SANReN network, at network speeds varying from 50 Mbit/s to 1 Gbit/s. For most of these campuses, the increment in capacity amounted to a qualitative change in connectivity, allowing them to do things that would have been previously inconceivable. To this extent, the project was a success and delivered most of the planned benefits.

As RCCP I drew to a close in late 2014, Universities South Africa (USAf) and TENET, in collaboration with the SANReN Competency area (SCA) team at the CSIR, jointly constructed a proposal for further funding for a second phase of the rural campus connections. In March 2015 the DHET approved a new grant of R71 million to USAf for the proposed programme to continue with the connection of rural university campuses to the SANReN network – RCCP II. The proposal planned for approximately 57 sites to be connected over the period April 2015 and to 31 March 2019. RCCP II includes funding for two additional components, namely, Capacity Development; and Operations and Maintenance of RCCP I circuits until end December 2017. Those sites identified but not connected in RCCP I formed the nucleus of sites that needed to be connected in what became RCCP II.

### Objectives and implementation overview of the RCCP II

The RCCP II aims to improve infrastructure and learning environments in rural campuses facilitated through improved broadband connectivity to priority 'rural' campuses not yet connected to the SANReN national backbone network. The broad stages of RCCP II included the following:

- **Mobilisation:** From April to December 2015 in the set-up phase, RCCP II activities focused on the establishment and formalisation of the necessary agreements, structures, capabilities and macro plans required to successfully implement RCCP II.
- **A Project Planning and Design Phase:** From July to December 2015, this phase included defining and agreeing on the site implementation approach as part of the ICT Connectivity Programme, as well as designing of the Capacity Development Programme.
- **ICT Connectivity Programme implementation:** From January 2016, the focus shifted to detailed implementation actions. A total of 30 sites were connected (with 31 connections provided) as part of Phase 1, 2 and 3. An additional Phase 4 was planned with 57 sites to be connected. Site connections will be commissioned from early 2018.
- **Capacity Development Programme implementation:** From May 2016, the Capacity Development Programme commenced. Twelve (12) key activities were planned. Five different kinds of workshops were successfully hosted. Maths video-conferencing kits were also provided to three Universities. A registration

and collaboration platform was developed (95% complete) but the platform, which provides a mechanism to underpin training activities has not been implemented. A further five workshops that were initially planned for had not yet been implemented by the time the Mid-Term Review was being conducted. It was found through interviews that some workshops were planned for implementation in 2018.

## Purpose and methodology

### Purpose of the Mid-Term Review

The purpose of this Mid-Term Review was to assess progress towards the achievement of the project's intended results by providing observations and supportive recommendations that would assist Universities South Africa, the Steering Committee and other RCCP II role players to reflect on the following:

- **Objective 1: Project management processes and structures;**
- **Objective 2: Progress with implementation;**
- **Objective 3: Early indications that it will meet intended outcomes; and**
- **Objective 4: Sustainability of the outcomes.**

Based on good evaluation practice<sup>1</sup>, the following two areas were also included as part of the Mid-Term Review:

- **Objective 5: Project relevance; and**
- **Objective 6: Validity of the project design.**

This Mid-Term Review was conducted from October 2017 to January 2018 to review and document learnings from the RCCP II over the period April 2015 to September 2017.

### Methodology

An utilisation-focused evaluation approach<sup>2</sup> was used as the basis for this Mid-Term Review. By using this theory to guide methodology decisions, this participatory, flexible approach incorporated stakeholders' values and provided solid, empirical data on which to base conclusions and recommendations.

The Mid-Term Review team focused on six main components that relate to the six above-mentioned objectives namely: (i) the effectiveness of implementation aspects relating to project management, administration and project governance (objective 1); (ii) the effectiveness of ICT implementation (objective 2); (iii) the effect on programme outcomes (objective 3); (iv) an assessment of sustainability of benefits to beneficiaries (objective 4); the relevance of the project in terms of national policies and beneficiary needs (objective 5); and the validity of the project design (objective 6).

A number of questions were used for each of the objectives as the basis for data gathering and analysis:

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<sup>1</sup> Good evaluation practice is based on the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee (DAC) criteria

<sup>2</sup> Utilization-Focused Evaluation (UFE), developed by Michael Quinn Patton, is an approach based on the principle that an evaluation should be judged on its usefulness to its intended users. Therefore evaluations should be planned and conducted in ways that enhance the likely utilization of both the findings and of the process itself to inform decisions and improve performance. Refer to [http://www.betterevaluation.org/en/plan/approach/utilization\\_focused\\_evaluation](http://www.betterevaluation.org/en/plan/approach/utilization_focused_evaluation)

**Objective 1: Project management processes and structures:**

- a. **Questions asked relating to efficiency of resource use:** Are resources allocated strategically to provide the necessary support to achieve the broader project objectives? Are resources adequate to fulfil project work plans? Are project activities in line with the work plans and are project expenditures in line with budgetary plans?
- b. **Questions asked relating to the effectiveness of governance and management arrangements:** Is the governance arrangement of the project adequate? Is there a clear understanding of roles and responsibilities by all parties involved? Are all relevant stakeholders sufficiently and appropriately involved?

**Objective 2: Progress with implementation:**

- a. **Questions asked relating to effectiveness of programme implementation:** What has the experience of beneficiary Universities been? Have challenges experienced by RCCP I been overcome?
- b. **Questions asked relating to existing needs:** What are existing capacity development needs of IT personnel at Universities?
- c. **Questions asked relating to lessons learnt:** Are there any modifications required to improve the RCCP II in its remaining months of implementation?

**Objective 3: Early indications that it will meet intended outcomes:**

- a. **Questions asked relating to effectiveness of programme results:** Are there indications that intended outputs and outcomes will be met? What improvements are there in terms of speed and reliability of connections? What benefits have been experienced by end-users? Are there any unintended results of the project?

**Objective 4: Sustainability of the outcomes:**

- a. **Questions asked relating to sustainability:** Are the benefits of RCCP II likely to continue? Are there any risks to sustainability of the project benefits?

**Objective 5: Relevance:**

- a. **Questions asked relating to relevance:** Is the project relevant in terms of National policies/strategies? Is the project relevant in terms of the need for ICT infrastructure by Universities?

**Objective 6: Validity of the project design.**

- a. **Questions asked relating to validity of the project design:** Is the project design valid in terms of being logical, coherent and adequate? Have targets and indicators been sufficiently defined for the project? Is the design realistic given the results achieved so far?

A total of 68 beneficiaries were interviewed. The candidates for all Tier interviews were purposively selected. Tier 1 interviews were conducted with the Funder, Steering Committee members and staff from USAf and TENET with a deep understanding of the project components. Tier 2 interviews were conducted with IT personnel who were identified as key points of contact at Universities connected as part of RCCP II, phases 1, 2 and 3, as well as the two Universities where a significant number of sites are planned for phase 4 connections. Tier 3 interviews were conducted with Maths lecturers whose details were made available for two of the Universities that form part of the National Research Foundation's (NRF's) Centre of Excellence Maths and Statistics project led by WITS. Tier 3 fieldwork further included site visits and interviews with end-users (staff and students). A total of three

Universities were selected for site visits and a total of eight Universities were selected for interviews with end-users.

## Mid-Term Review Findings and Recommendations

### OBJECTIVE 1: PROJECT MANAGEMENT PROCESSES AND STRUCTURES

The first dimension of the Mid-Term Review reflected on the effectiveness of project management processes and structures. The following was found:

#### EFFECTIVENESS OF GOVERNANCE AND MANAGEMENT ARRANGEMENTS:

The institutional arrangements that govern the project are adequate. The two committees were put in place, namely, the Steering Committee and Technical Committee, and the way they were implemented, resulted in good governance.

The roles and responsibilities of all parties were clearly understood by key stakeholders (USAf, Steering Committee Members, DHET, TENET, CSIR SCA and Universities). Each stakeholder was able to indicate what was expected of them as part of the RCCP II project.

The review found that in some Universities, challenges exist in terms of either internal network issues or human capacity constraints that created delays or challenges in ensuring that sites go live from the University's side. It may be necessary to extend RCCP II's responsibility to support Universities more during technical implementation.

#### EFFICIENCY OF RESOURCE USE:

As an outcome of the Mid-Term Review it was found that **resources were allocated strategically** to the ICT Connectivity Programme – placing a Project Manager in a full-time capacity to manage the ICT Connectivity Programme within TENET enabled the project to deliver more connections than planned within the project timeframe. The review found that financial management and project management was considered as 'highly effective' for the site connections component because 30 sites were connected in 18 months (with 31 connections) using only half of the available budget, which allowed for an additional 57 sites to be connected as part of the phase 4 stage in the remaining project timeframe.

On the other hand, for the Capacity Development Programme, although a strength of the Programme was to partner with Experts to deliver various initiatives, **the human resource capacity** required to manage the Capacity Development Programme was under-estimated. This has meant that there was slow progress in delivery of planned outputs for the Programme. Findings from documents reviewed and interviews held highlighted that of the R7 000 000 put aside for Capacity Development, only R1 217 389 had been spent on Capacity Development activities at the time of the Mid-Term Review.

#### Recommendations:

Because spending has not been at the level planned (mainly because of the absence of a dedicated resource to project manage the Capacity Development Programme), it is important to clarify the key activities on which the remaining Capacity Development budget should be spent in 2018 and to consider additional project

management capacity for these activities, based on learnings and recommendations presented from this Mid-Term Review.

## OBJECTIVE 2: PROGRESS WITH IMPLEMENTATION

The strength of the programme implementation team was demonstrated by their ability to improve implementation in a way that resolved the key challenges identified in RCCP I, that is:

- (i) Including sites at the urban edge based on University priorities;
- (ii) Improving coordination with SANReN with frequent coordination and a healthy relationship; and
- (iii) Putting in place a dedicated Project Manager at TENET and a Capacity Development Programme to overcome shortcomings of RCCP I.

In addition, some weaknesses identified in RCCP II, Phase 1, 2 and 3 have also been considered as part of an improved RCCP II, Phase 4. These include:

- (i) Considering a more hands-on approach to identify possible delays during the planning and implementation stages;
- (ii) Considering the provision of support to Universities by renewing connections that have reached their end-of-life or enhancing equipment to improve the connection; and
- (iii) Considering deeper engagement with Universities that have not come forward with sites prioritised for connection.

University participants who attended Capacity Development workshops provided positive feedback on their experiences and indicated that workshops are suitable to teach the knowledge and skills required. However, many of the IT personnel interviewed from the various Universities acknowledged that they have financial, geographic and human resource constraints that hinder their attendance. IT personnel also suggested that they could be the point of contact for invitations to workshops. IT personnel highlighted the need for video online seminars or webinars to compliment workshops because of the financial, geographic and human capacity constraints.

Almost all of the Universities had an overall positive experience of Tenet's University engagement process to clarify the project mandate and during technical implementation to implement the ICT connectivity. Although most Universities had no challenges experienced during technical implementation, the following observations were made by a few IT personnel from some Universities that experienced difficulties during technical implementation:

- **Unforeseen delays:** Some unforeseen delays were resolved quickly, where others took time. **Environmental Impact Assessments** at some sites impacted on **go-live dates**, which meant that Universities that had expectations in this regard, were disappointed because of these dates being delayed and lack of clarity around actual go-live dates.
- **Planning by Service Providers:** A second observation related to Service Provider internal efficiency, was the challenge cited by an interviewee from one University who complained about the Service Provider sending different site planners to meetings, which caused delays in decision making around where to dig as part of the Technical Implementation phase. What may be relevant is further exploration around improved planning by Service Providers.
- **Limited communications with Universities to plan and execute the commissioning phase:** The RCCP II, Phase 1, 2 and 3 implementation focused on successfully providing a physical connection and backbone connection that required Service Provider installation and TENET configuration, but there was little emphasis placed on the configuration required on the side of the University. This left a gap on the side of Universities because in many cases, they did not know until after installation and TENET configuration that they needed components/links to ensure a smooth transition from the old ICT

infrastructure to deployment of the new ICT infrastructure. Such limited communications between TENET and Universities resulted in the inability by some Universities to plan for their connection to the backbone until after the backbone connection was commissioned, which created unnecessary surprises and delays on their part and which hindered a smooth process to commission the site for some Universities. Findings from some interviews suggest that IT personnel at some Universities who are part of the RCCP II Programme may lack the necessary insight, skill and/or understanding to configure their ICT infrastructure to ensure maximum usage of the RCCP connectivity once the connection is provided. Although most of the Universities (73%; 11 of 15) experienced an improvement in the connectivity at RCCP II sites, there were challenges cited at 27% of the sites (UWC, UMP, WITS and UNISA RCCP sites). Limitations highlighted on the University side of the connection included the following:

- (i) Limited or no reach to the Wi-Fi connectivity (UWC, RU and UNISA);
- (ii) Firewalls on sites that should be accessible but are blocked (SUN); and
- (iii) The challenge of laptops disconnecting after a short time (UMP and UNISA).

**Recommendations:**

Because of many Universities being under-resourced in terms of human resource capacity and specifying that they could do with more skilled IT personnel, there is an interest by IT personnel from Universities that capacity development workshops be complimented with video online seminars or webinars.

It may also be worthwhile to offer more sponsorship/bursaries for the travel costs and accommodation of personnel for capacity development workshops so that there are no financial constraints that hinder attendance.

For capacity development workshops that could benefit a number of IT personnel from one Department in a University, it is recommended that RCCP II consider running two of the same workshops at different times to allow for attendance by more than one person from Universities, especially at Universities that are under-resourced in terms of human resource capacity. It may also be worthwhile to consider online seminars or webinars to compliment workshops.

It is recommended that possible delays into the RCCP II Phase 4 timeframe and a more hands-on approach be taken to identify such delays during the planning stage. There could be more intentional planning in terms of delaying communicating a go-live date until there is a better understanding of the key variables that feed into the go-live date as part of the planning phase. This may include clarifying the exact location, permissions required and identification of key stakeholders to be consulted. Once stakeholders on the ground are engaged and the environment is well understood, after all possible delays are pre-empted, only then is it recommended that a go-live date be communicated to Universities.

It is worthwhile exploring whether an improved mechanism for communication is feasible as part of the project implementation mechanism in order to (i) understand possible delays and to (ii) keep all parties informed of the extent of actual delays.

It may be necessary to extend RCCP II's responsibility to include more support relating to the connectivity requirements on the University's side to ensure that sites can 'go-live' without delays or challenges. This may require some capacity development support (through on-site collaboration) by TENET as part of this process to develop the skills of IT personnel to set up University ICT infrastructure in a way that maximises/optimises the use of the link provided.

It is worthwhile exploring the challenges highlighted by staff and/or students to better understand their inability to access the ICT connectivity provided by RCCP II and to support Universities (through capacity development) to rectify existing issues. Some of the topics identified by IT personnel that could be considered as part of the

Capacity Development Programme include 'expanding the reach to the Wi-Fi Connectivity', 'accessing firewalls' and 'how to deal with the challenge of laptops disconnecting after a short time'.

#### EXISTING CAPACITY DEVELOPMENT NEEDS:

IT personnel highlighted a number of capacity development needs that could be considered as part of the RCCP II programme going forward. These needs included:

- (i) Technical training on network equipment;
- (ii) Knowledge on cabling;
- (iii) An ITIL course;
- (iv) Cloud computing and how to make the backbone resilient;
- (v) Looking after the WAN;
- (vi) Links and different technologies to inter-connect sites;
- (vii) Training on Wi-Fi troubleshooting;
- (viii) Disaster recovery;
- (ix) Cyber security;
- (x) Learning how to improve on maximising the use of the 10 gigabit/second connection (TCP optimisation techniques); and
- (xi) Service Provider skills.

In addition, other areas highlighted by Universities as areas where they need capacity development support included:

- (i) The need for extended Wi-Fi reach and training on troubleshooting;
- (ii) The need for improved video and sound for skype video and video-conferencing;
- (iii) The need for more video-conferencing facilities to be set up. A key learning from the Mid-Term Review is that the usage of video-conferencing kits is likely to increase if the device is set up permanently in an office with access to students, if it is functioning properly, if an end-user has the ability to set it up and if there is support from staff to facilitate collaboration and learning experiences with other Universities.

#### **Recommendations:**

It is worthwhile exploring and prioritising the most feasible capacity development topics to be offered to IT personnel and to staff across Universities in the remaining implementation timeframe as part of either the capacity development or the ICT Connectivity Programme, based on the importance of the skills/knowledge need to support and maximise the connection, as well as the availability of learning material and/or Training Provider Partners. Some of the topics that could be considered as part of the Capacity Development Programme include 'considerations for improving the quality of video-conferencing', 'expanding Wi-Fi reach to include more staff/students' and 'training on troubleshooting to resolve system issues'.

It is recommended that the project team investigate the reasons for poorer quality experienced by some Universities who make use of skype video and video-conferencing and determine whether the Capacity Development Programme can provide support in developing skills and knowledge to overcome some of the challenges.

### OBJECTIVE 3: EARLY INDICATIONS THAT THE PROGRAMME WILL MEET INTENDED OUTCOMES

The Mid-Term Review found that overall, the programme is likely to meet intended outcomes. The following was found:

#### ASSESSING PLANNED PERFORMANCE AND DESIRED OUTCOME MEASURES AGAINST ACTUAL PROGRESS:

Most of the direct performance measures and desired outcome measures for the project outputs **have been reached or are on track to be met**. These include:

- **Project Output 1** (connection of identified University campuses);
- **Project Output 2** (Connection of WSU Health Centres);
- **Project Output 3** (Capacity Development Programme established);
- **Project Output 4** (video-conference entrenched as a tool); and
- **Project Output 5** had been partially met (improved Disaster Recovery infrastructure for specific rural Universities).

However, the Mid-Term Review could not measure some desired outcome measures such as desired outcome measure 3.3 (Communities of Practice established), desired outcome measure 4.2 (at least 50% of institutions using SANReN video conferencing services or web conferencing tools) and desired outcome measure 5.2 (Disaster Recovery site and diverse/circuit routes to Disaster Recovery sites ensuring full redundancy for rural institutions). The measures and milestones were not clearly defined for these indicators and the Mid-Term Review found that there were not strong enough links between activities provided and these desired outcome measures.

#### PROGRAMME RESULTS THAT DEMONSTRATE THAT THE PROGRAMME IS ON TRACK TO MEETING INTENDED OUTCOMES:

The following positive programme results were identified through the Mid-Term Review that provide supportive evidence that the programme is on track to meet most of its intended outcomes:

- According to all IT personnel interviewed, there was a **significant improvement with the speed, reliability and latency** at all University sites where RCCP II provided connections. IT personnel at all Universities reflected on challenges with previous connections, including very slow speeds, low bandwidth, high costs, unreliability of the connection and extended downtimes.
- A number of **benefits** were **experienced by staff, researchers and students** who made use of the connectivity, including improved access to information; improved network accessibility from more areas around campus; improved quality and depth of training, research and development; improved efficiency of communication and collaboration within and between Universities; and the ability to keep data 'in the cloud'.
- **Lecturers from Universities** that received **Maths video-conferencing kits** shared that there was **greater collaboration, as well as saving time and costs on travel**. University of Limpopo shared that they maximised opportunities by using their kit to build relationships and collaboration efforts with international partners. The Lecturer who was interviewed stated that in the past two years, the kit contributed towards their Statistics Department graduating four PhD students for the first time ever in the school of Mathematical Sciences. The Mid-Term Review further found that, under the right conditions, a video-conferencing kit provides an improved doorway to the rest of the world and is a platform for staff and students to grow their skills.

- Some **unintended positive results** of the RCCP II Programme included (i) an increased sense of belonging and equality as a rural staff member or students who now ‘feel more part of the University’ because of having equal access; (ii) the ability to use different mediums to study (such as YouTube); saving fuel costs, printing costs and courier costs, saving time because of video-conferencing, students no longer having a need to go to an internet café or buy their own data and reliable bandwidth that allows for uploading large data immediately. Other unintended benefits that were cited included social networking and online buying.

The Mid-Term Review provided overall positive findings for the RCCP II Programme. However, it was learnt that no success stories had been written up.

#### **Recommendations:**

There is a need to map out the programme logic, detailing the activities that link to intended outputs and outcomes in order to facilitate an improved understanding of programme achievements and to assist in the tailoring of the balance of the capacity development program.

It is recommended that the Steering Committee consider including, as part of the Capacity Development Programme, developing skills of staff and students to make better use of the connection available for video-conferencing.

It is further suggested that the Steering Committee re-consider whether provision of video-conferencing kits to Universities is within the ambit of the RCCP II or whether the focus should be merely to build a Community of Practice where end-users are able to share learnings and good practices to maximise the use of connectivity for video-conferencing.

It is believed that some of the findings provide concrete evidence of the difference that was made to the lives of staff and students at Universities because of the RCCP II Programme. Follow-up interviews are recommended with some staff and students to enable the write-up of success stories to be shared about the RCCP II Programme.

#### **OBJECTIVE 4: SUSTAINABILITY OF THE OUTCOMES**

The benefits of RCCP II are likely to continue because critical elements are in place to ensure the sustainability of project benefits. Critical elements that are in place include:

- (i) Financial resources and commitment by Universities to ensure ongoing payment of monthly costs;
- (ii) ICT infrastructure capacity availability on the SANReN network;
- (iii) Ongoing service delivery support through TENET’s Service Operations Centre (SOC);
- (iv) ICT infrastructure capacity within the University to deploy and maintain network access equipment; and
- (v) IT personnel capacity to manage the network.

However, some interviews highlighted that there were some University sites that experienced challenges with their RCCP II connectivity at the time of the Mid-Term Review. This was due to being either remote sites where distances are large or being a University where connections provided as part of RCCP I were reaching their end-of-life. Faulty equipment was also found to cause challenges with RCCP II connectivity.

Financial resources were noted as the main risk to sustainability of the RCCP II connectivity because Universities are already under budget constraints. However, Universities indicated that they had budgeted for ongoing monthly costs associated with maintaining the RCCP II connection.

**Recommendations:**

It is worthwhile renewing or upgrading connections that have reached their end-of-life as part of the RCCP II programme.

It may be beneficial to consider the feasibility of conducting (through support of Service Providers) spot-checks on equipment at regular time intervals, along with regular touch-base sessions with Universities to discuss any challenges and provide relevant support.

**OBJECTIVE 5: PROGRAMME RELEVANCE**

The RCCP II Programme is relevant for the following reasons:

- **Alignment to the White Paper for Post-School Education and Training: The White Paper emphasises the importance of “equitable access to appropriate technology”.** RCCP II accelerated the process of ending bandwidth poverty by providing the same level of ICT infrastructure and connectivity to urban-edge or rural Universities and remote University campuses as the ICT infrastructure that has been available to metropolitan Universities through the SANReN network. **ICT infrastructure has allowed for more meaningful participation in a globalised world.** Mid-Term Review findings described how video-conferencing kits assisted students and staff to connect to Universities locally and globally, allowing improved teaching, learning and development, which has resulted in more post-graduate degrees and a greater number of quality publications. **ICT infrastructure opened learning opportunities and supported more effective education.** Staff and students shared that they have increased access to information because of uninterrupted connectivity, which has improved the quality and depth of training, research and development, communication and collaboration, as well as improved data storage (in the cloud). In addition, ICT infrastructure has provided time and cost savings and created a sense of belonging to a University.
- **Universities would be unable to afford connectivity to their remote sites if there was no support through the RCCP II Programme:** IT personnel interviewed at all Universities also acknowledged that the monthly fees for ongoing operations and maintenance are reasonable and much less than they would have been for the same level of connectivity with another Service Provider. The connections that the Universities had before RCCP II provided limited speed and bandwidth, which limited the Universities from delivering core services at the sites which have now been connected through the RCCP II programme.

**OBJECTIVE 6: VALIDITY OF THE DESIGN**

**The ICT Connectivity Programme was well designed to accommodate efficient and effective implementation.** The design of the ICT Connectivity Programme is adequate and logical because of a number of design elements, which included the following:

- A flexible arrangement presented by the Funder;
- A professional core implementation team that included a dedicate Project Manager (at TENET) and a Technical Project Manager to support and strengthen USAf’s role;
- Ongoing collaboration on technical matters with the SCA;

- The participative University engagement process and approach to formalising the agreement to connect sites;
- The approach to allow Universities to lead in identifying and prioritising sites;
- The sound RFP process to select suitable Service Providers; and
- A learnings approach that takes forward learnings from past implementation weaknesses and challenges

The **Capacity Development Programme was designed to leverage from existing capacity building initiatives and to improve communications, teaching and learning.** The design of the Capacity Development Programme was coherent: - activities were identified, their purpose and target audience described, along with a planned timeline and budget breakdown. The following elements contributed towards achievement of some outputs:

- An approach that was based on a widely used IT framework (People-Process-Technology);
- Target beneficiaries were identified;
- The programme was established on a partnership model; and
- The programme was broadly defined how capacity will be built.

However, it was found that the Capacity Development Programme was not thought through as deeply as was necessary to meet planned outputs and outcomes. The elements, upon which the design was premised, were not sufficient to guide successful implementation. The following design elements were identified as key elements to consider so as to increase the likelihood of the programme reaching the planned outputs and outcomes to the extent that the project team envisage:

- **Increased Human Resource capacity to manage the Programme:** Feedback from interviews found that there was no dedicated full-time Project Manager for the Capacity Development Programme.
- **University engagement process to keep beneficiaries abreast of upcoming opportunities:** The Review found that there was no intentional plan in place to keep beneficiaries informed of capacity development opportunities taking place during the year, to allow them to plan in advance. Although an online system was planned, because it was not live, there was limited ability to communicate with all potential workshop attendees through a portal. Some IT personnel suggested during interviews that they could be the point of contact for distributing workshop invitations.
- **Identifying how best to support Universities to meet Training and Development needs:** There was no Capacity Development Programme needs assessment to identify how best to support Universities in terms of meeting training and development needs, hence capacity development needs at Universities relating to ICT network support and usage are not clearly identified or prioritised.
- **Formalising evaluations to obtain feedback on activities implemented and on learning and development outcomes:** Feedback from interviews highlighted a limited reflective feedback process and limited formal measurement to inform the Capacity Development Programme improvement (level of attendance, challenges/hindrances in implementation, progress towards outputs, etc.).
- **The logical framework has not been sufficiently mapped for the Capacity Development Programme:** The Review found that the causal link between activities provided and the establishment of Communities of Practice is not clear.

**Recommendations:**

It may be of value to develop a logic model<sup>3</sup> for the RCCP II Programme as a whole, with clear definitions for concepts (including the ICT Connectivity and the Capacity Development Programme components) so that there is a shared understanding of the programme by all stakeholders, a clear understanding of how the programme's assumptions and how inputs and activities will lead to expected results and how the programme's vision will be achieved. It is further suggested that the project team document and clearly define milestones for the RCCP II Programme.

It may be worthwhile conducting a benchmarking study to identify other effective Capacity Development models within this environment that could inform an improved design of the Capacity Development Programme to ensure outcomes are reached.

It is recommended that a dedicated Project Manager be employed for the Capacity Development Programme so that the programme can be driven on a full-time basis, similar to what was done for the ICT Connectivity Programme. It may be useful if a dedicated Project Manager can also play the role of a Training Manager who can engage with beneficiaries to perform training needs analyses, to identify existing programmes to re-use or learn from, to implement train-the-trainer initiatives and to perform Training Competency Assessments to measure the success of the training being delivered through RCCP II.

It is worthwhile formalising a process to identify capacity development needs of IT personnel, Library support staff and academics (relating to RCCP II network support and usage). This could be done through a needs assessment or survey conducted annually.

It is worth exploring whether invitations sent through the IT Department are the most effective way to increase the likelihood of reaching the right beneficiaries.

It may be worthwhile formalising Capacity Development measurements in terms of pre-implementation and post-implementation assessments to obtain feedback on all capacity development activities implemented, along with feedback on the perceived increase in understanding key skills/knowledge development during the intervention. A baseline measure is recommended before a workshop commences and an evaluation is recommended two to three weeks after an intervention so that feedback can be obtained for learning and improvement.

It is recommended that the project team prepare an annual calendar with key dates for Capacity Development initiatives so that beneficiaries can plan in advance.

The 'Registration and Collaboration Site' platform (which is already developed and paid for by the programme) could be explored to determine whether it is a suitable platform to facilitate communications with Capacity Development Programme beneficiaries and whether it is a suitable tool to support the establishment of Communities of Practice. Should findings demonstrate feasibility of the tool, it is suggested that it be launched as soon as possible to benefit the Capacity Development Programme and the desired outcome measure 3.3 i.e. establishing Communities of Practice.

To establish Communities of Practice, it is recommended that ongoing online seminars be introduced as part of the Capacity Development Programme.

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<sup>3</sup> The logic model forms part of the outcomes approach, which is designed to ensure that Government is focused on achieving the expected real improvements in the life of all South Africans. The outcomes approach clarifies what we expect to achieve, how we expect to achieve it and how we will know whether we are achieving it. It helps to track the progress that is made in achieving results and it helps to clarify the collection of evidence about what worked and did not work in order to improve planning and implementation. Refer to [www.dpme.gov.za/publications/.../Guideline%20to%20outcome%20approach.pdf](http://www.dpme.gov.za/publications/.../Guideline%20to%20outcome%20approach.pdf)

### **RECOMMENDED STEERING COMMITTEE RESPONSE TO MID-TERM REVIEW FINDINGS**

A number of supportive recommendations have been presented to the Steering Committee for consideration as part of this Mid-Term Review. Feedback provided in Draft Mid-Term Review reports covered findings and recommendations outside of the scope of the Steering Committee. This Final Mid-Term Review report focused on findings and recommendations over which the Steering Committee have control.

The Mid-Term Review findings and recommendations are set out in detail in the body of the report and are summarised as part of the Executive Summary.

It is recommended that, in order to derive full value from this review, a process be established in the RCCP II programme whereby each recommendation in this report is considered and appropriate actions plans developed and taken forward.