

SANReN Project Status Report



Period Ending: 29 November 2010

Executive Summary

During the course of the past few months network rollout has advanced steadily in the major metropolitan areas of Tshwane, Ethekwini and Cape Town. RFPs for the installation of network links to remote sites have been published. Contracting with new equipment vendors has commenced and testing of said equipment has been completed. The installation of a temporary service to the SKA core site has commenced and the negotiations around the installation for a permanent solution have been concluded. Funding agreements with the NRF have been signed and additional funding for connectivity of remote sites has been obtained. International workshops and conferences were attended where the particular focus was on Africa and collaboration with other African NRENs.

Significant Accomplishments - This Period

- **Network installation in Cape Town** is progressing smoothly. A dedicated project manager is being appointed in Cape Town who will oversee the completion of the project. Final costing of all the sites has been completed, access builds to all the sites is now starting. Core routes are still under construction. It is anticipated that the Cape Town network will be mostly completed by June/July 2011.
- **Tshwane network installation** is still in progress. Access and core route builds to most sites have been completed. The contractors are now in the final phases of installing, terminating and testing fibre optical cables to sites. This portion of the work is time-intensive and requires numerous visits to all the sites. It is expected that portions of the Tshwane network will be able to go live in January 2011. Full network completion is currently estimated during April 2011.
- **The Ethekwini network installation** has been completed. A post-installation quality assurance audit revealed a number of small problems that need to be resolved before the network is accepted as fully operational. The problems are being addressed and the next audit is scheduled for 6 December 2010. It is expected that the network will be fully operational by the end of January 2011 at the latest.
- After the conclusion of an RFP process, contract negotiations have commenced with four **major equipment suppliers**. Contracts are being finalised and equipment orders will be placed soon.
- In parallel with the contract negotiations, final **testing of proposed new equipment** has been completed in partnership with TENET. The testing has revealed that all equipment selected is suitable for deployment in the SANReN network, and confirms

that orders can now be placed.

- The next **major network RFPs** (7 RFPs in total) have been completed and released. These RFPs ask for the construction of networks in areas such as the Eastern Cape, Limpopo, Mpumalanga, North-West and Pietermaritzburg. This process in particular addresses many of the remote sites that have as yet not been connected to the SANReN network. The RFP process will close in mid December, and evaluations will be completed in January 2011.
- The planning and commissioning of installation of the telecommunications links to the **SKA site in Carnavon, and the SALT site in Sutherland** has been completed. Through a RFP process, a partnership between Broadband Infracore and Neotel has been selected to install the 10 Gbps communications links to those sites. Installation is expected to be completed in June/July 2011.
- **An interim 10 Mbps telecommunications solution** will be installed by Telkom SA Limited to the SKA core site in Carnavon as a temporary solution while the 10 Gbps solution is being implemented. Telkom has already started with the installation and the link is expected to be completed before the end of December 2010.
- A **funding agreement** to the value of R 64 million (including VAT) has been signed with the NRF. The money will be transferred to the CSIR and utilised to co-fund the installation of the 10 Gbps telecommunications network to the SKA core site in Carnavon.
- The SANReN/CSIR has received an **additional R 55 million** (including VAT) from the NRF specifically to co-fund the installation of telecommunications networks to remote sites. The funding agreement has been approved by the CSIR and is currently with the NRF for final approval before it can be signed.
- Members of the SANReN team attended the **ERINA4Africa workshop** in Lilongwe, Malawi. The workshop was hosted by the Ubuntunet Alliance, the regional research and education network of South and Eastern Africa. The workshop focussed on developing potential applications specific for the African context that can be provided by research and education networks in Africa. The workshop allowed the Meraka Institute to present the work that has been done in the establishment of the South African Grid initiative, and the SANReN project. Much of the learning obtained in South Africa as a result of the SANReN project was passed on to other developing NREN's, especially MAREN, the Malawi Research and Education Network.
- The SANReN team attended the **Ubuntunet Connect conference** during November, and participated in the kick-off meeting of the Africa Connect project. The Africa Connect project is a European Commission funded project that aims to connect South-Eastern African countries with broadband connections. The Ubuntunet Connect conference brought together all the research and education networks in South-Eastern Africa and discussed many topics relevant to the networks. During the conference many collaborative ties were established with other African NRENs. SANReN is in a unique position in Africa as the most advanced NREN, and the SANReN team will assist other NRENs wherever it can.

- The first collaboration to come from the Ubuntunet Connect conference will be together with the Zimbabwean NREN. It has been agreed that SANReN will pass on learning and expertise to this NREN.
- A draft terms of reference (ToR) for a **SANReN Advisory Forum (AF)** has been prepared in preparation for the establishment of the forum early in 2011.

Planned Accomplishments - Next Period

- Complete the Ethekwini network installation, make the network fully operational.
- Continue to monitor the Tshwane network installation. Take the DWDM portion of the network live and make good progress on the grey ring portions of the network.
- Continue the installation of the Cape Town network. Ensure that the access build portion of the network progresses smoothly, and try to get core routes finalised as far as possible.
- Complete the evaluation of the RFPs (January 2011) that have been issued for the installation of network connections to SANReN remote sites.
- Finalise and sign the contracts for equipment provision with the newly appointed equipment vendors. Place new orders for equipment and install once these arrives.
- Complete the installation of the temporary 10 Mbps service to the SKA core site. Ensure that the outstanding contract with Neotel/Broadband Infracore is signed and that work can commence in earnest.
- Finalise and sign the funding agreement between the CSIR and the NRF for the additional R 55 million that will be used for the connection of remote sites to the network.