

## Radio telescope project advances with issue of tender

By: Keith Campbell  
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With construction work for the KAT-7 radio telescope testbed now under way in the Karoo, SKA South Africa has issued a tender for design and engineering services for the next stage of the project to build the biggest scientific instrument in South African history, the MeerKAT radio telescope.

"The engineering services for KAT-7 were provided by the Northern Cape government," explains SKA South Africa Project Manager: Infrastructure **Tracy Cheetham**. "However, we shall manage MeerKAT, so we are issuing this tender."

KAT stands for Karoo Array Telescope and will comprise seven 12-m diameter dishes (hence the name KAT-7) while MeerKAT will be one of the biggest radio astronomy instruments in the world, with up to 80 such dishes. (Meer translates into English as more: hence, MeerKAT signifies More Karoo Array Telescope, as well as being a reference to

the lovable African mammal that operates in groups and always keeps a sharp eye and ear open on the surrounding environment.)

Bids must be submitted by 16:00 Monday June 8. The scope of the work will include the design and construction management of the foundations for the dishes, the MeerKAT reticulation system, electrical and electronic systems, and other facilities.

"Whoever the winner is, we want the work to start in August," she states. "Completion of the construction of MeerKAT is scheduled for December 2012, with commissioning in 2013."

SKA South Africa recently also issued a tender for optical fibre and electrical connections to its Karoo site, for both the KAT-7 and MeerKAT.

Both instruments are also key elements in South Africa's bid to host the international €1,5-billion Square Kilometre Array (SKA – hence SKA South Africa) radio telescope.

In fact, the winner of the engineering services tender will also have to undertake site characterisation studies and cost optimisation studies for infrastructure for the SKA South Africa site bid.

This country and Australia are the only two countries on the short list to host this instrument, which will be the most powerful radio telescope ever built. The South African site for these instruments is located some 100 km west of the small Northern Cape town of Carnarvon.

As the programme develops, KAT-7 will be incorporated into MeerKAT and MeerKAT, hopefully, will in due course be incorporated into the SKA. Should Australia be chosen to host the SKA, MeerKAT will remain one of the most important radio telescopes in the world.