

## ANNEXURE A

### Three scenarios:

The example scenarios provided below will be used as test cases to; determine the bidder's ability to meet the scope of work and to evaluate on price.

Instructions:

The bidder should consider the three scenarios below and submit a proposal addressing the following areas:

- Methodology
- Measurement to be taken
- Equipment to be used
- Timelines
- Analyses of data
- Presentation of results
- Recommendations on corrective actions
- Travel and accommodation, if applicable
- Pricing schedule to factor in all of the above elements.

### Scenario 1:

In one of SANSa's outside buildings, that housed electronic equipment, a SANSa engineer noticed that oscilloscope probes, that were connected to the oscilloscope, with the other sides hanging down and being in contact with the corcoleum floor, "corroded" during a very short time period. Please indicate what type of measurements and methodology will be used to pin point the possible cause of the problem.

### Scenario 2:

During load shedding, when the SANSa generator is operating, an increase in the AC noise levels, between 50Hz and 2 kHz, is seen on a SQUID magnetometer about 100 m away. Please indicate the measurements that will be taken to characterize the source of the magnetic disturbance.

### Scenario 3:

SANSa is installing a hybrid solar power system consisting of an inverter, charge controller, PV panels and battery bank. The project manager is concerned that the system may cause unwanted conducted and radiated interference on the observatory equipment. Please indicate the measurements that will be taken to characterize the interference and the impacts on the observatory equipment.