

Annexure A

Extracted from the agreement between SARAO and SAEON. Deliverables SARAO requires in order to comply with the IEMP requirements.

1. SAEON will conduct an ecology, biodiversity and surface water (aquatic) site walk-through for SKA1_MID.

1.1 SAEON will conduct the walk-through prior to construction of SKA1_MID, in line with the requirements stipulated in the Integrated Environmental Management Plan (IEMP);

1.1.1 A site walk-through is required to confirm the distribution of species of conservation concern, improve the course nature of the sensitivity mapping undertaken during the Strategic Environmental Assessment (SEA) specialist studies and to supplement fieldwork already undertaken by the specialists on the SKA Site and three spiral arms; and

1.1.2 The walk-through will concentrate on the construction footprint of SKA1_MID considering the final locations for all infrastructure - telescopes, cable trenching, roads, power lines, construction sites and all associated infrastructure (including all guest instruments being/to be undertaken on the SKA Site and along the three servitude spiral arms).

1.2 The walk-through will involve a physical survey, on foot, of the final footprint of the SKA1_MID by a/ suitably qualified ecologist/ecologists;

1.3 SAEON will undertake the walk-through taking into consideration the specialist report findings already compiled as part of the IEMP;

1.4 SAEON will undertake the walk-through taking into consideration the recommendations and mitigation measures reported by the SEA specialists and compiled in the specialist assessment reports;

1.4.1 During the site walk-through particular attention must be focused on those sites identified as “*high sensitivity*”, “*very high sensitivity*” and “*no-go*” areas for construction; and

- 1.4.1.1 “No-go” areas identified during the Biodiversity and Ecology specialist assessment included: areas with *Aloe dichotoma* populations, exposed mudstone rock sheets, koppies and steep slopes, red sand dunes and shallow water bodies such as pans and wetlands;
 - 1.4.1.2 In accordance with the Biodiversity and Ecology specialist assessment attention should also be focused on the key heterogeneous areas of the site as these are most likely to support sensitive habitats or species of conservation concern. These sites include: the southern mountains of the SKA core area with steep dolerite boulder hills and screes; the eastern extreme of the Brandvlei Arm comprising ephemeral pans, dolerite and Ecca outcrops and outwash fans; the northern part of the Van Wyksvlei arm comprising dolerite outcrops, broken topography, and red dunes and near Williston comprising dolerite and mudstone hills, calcrete and sand plains and alluvium along the course of the Sakrivier;
 - 1.4.1.3 The rivers and wetlands delineated during the Aquatic assessment must be verified in the field. In particular those with definitive boundaries that have been listed as “no-go” areas including very sensitive wetlands: depressions, seeps and wetland flats and watercourses;
 - 1.4.1.4 Verify Aquatic assessment findings identifying the infrastructure and all associated infrastructure related to SKA1_MID that fall within: a “no-go” wetland, a “high sensitivity” wetland, 500 m of a “no-go” wetland, 500 m of any wetland, a watercourse or the 32 m buffer zone around a water course; and
 - 1.4.1.5 Identify the locations where infrastructure and all associated infrastructure related to SKA1_MID will cross over a wetland or watercourse, will result in the re-shaping/altering of beds or banks of watercourses or wetlands, and will result in the diversion of flow from a watercourse or wetland.
- 1.4.2 During the walk-through particular attention must also be focused on the location of the proposed SKA1_MID borrow pits and stone quarries.
- 1.5 During the site-walk through particular attention must also be placed on locations where any SKA1_MID infrastructure and all associated infrastructure have been changed from the time the SEA Specialist assessments were undertaken;

- 1.6 During the SKA Site and spiral arms walk-through, the presence of bats must be recorded and the GPS coordinates or the locations of any nests and feeding grounds recorded;
- 1.7 The outcome of the SKA Site and servitude spiral arms walk-through will be the Ecological and Aquatic Management Plan. SAEON will be responsible for developing this plan for the SKA Site and along the three spiral arms. The Ecological and Aquatic Management Plan will include:
 - 1.7.1 The outcomes of the walk-through;
 - 1.7.2 Details on the listed and protected plant and animal species within the SKA Site and along the three servitude spiral arms;
 - 1.7.3 Updated mitigation measures as seen in the SEA specialist assessments; and
 - 1.7.4 Identification of any and/or all infrastructure and all associated infrastructure for SKA1_MID that will need to be moved to avoid any very high sensitivity or “no-go” areas.
- 1.8 On completion of the walk-through SAEON will also be required to provide shapefiles and/or .kmz/.kml files of the verified and corrected watercourses and wetlands and areas of biodiversity and ecological sensitivity – improving on those shapefiles or .kml/.kmz provided by the SEA specialists for sensitivity analysis;
 - 1.8.1 All shapefiles and/or .kml/.kmz files must be provided to SARA0 with metadata;
- 1.9 Following the site walk-through SAEON will develop a Revegetation and Rehabilitation Plan and a Plant Rescue and Protection Plan for SKA1_MID; and
 - 1.9.1 SAEON must develop all plans in line with the requirements stipulated in the IEMP and those requirements stipulated in the Biodiversity and Ecology specialist assessment.
- 1.10 SAEON will advise SARA0 in the preparation of documentation for all necessary permits pertaining to the findings of the walk-through, as stipulated in the IEMP.

1.10.1 In accordance with the Northern Cape Nature Conservation Act (Act No. 9 of 2009) a permit is required if one destroys, translocate, transports or cultivates indigenous, protected and specially protected plant species (issuing authority: Northern Cape Province: Department of Environmental Affairs and Nature Conservation); and

1.10.2 In accordance with the National Environmental Management: Biodiversity Act (Act No. 10 of 2004), Alien and Invasive Species List, 2014 (GG No. 37886), a permit is required if you retain Alien Invasive Plant Species (Categories 2 or 3) in demarcated areas. Permits are also required for biological control reserves (where alien invasive plants can be maintained for breeding of biocontrol organisms. The issuing authority is the Department of Environmental Affairs.

2. Conducting an Environmental Baseline Study on the SKA Site and three spiral arms.

2.1 SAEON will conduct an Environmental Baseline Study on the SKA Site and spiral arms servitude line to provide a quantitative baseline dataset to lay a foundation for future observations of change;

2.2 SAEON will improve the baseline assessment produced previously as part of the IEMP and SEA specialist Core Area Assessment document;

2.2.1 In particular the fine-scale habitat map of the SKA Site and extending it to cover the SKA spiral arms servitude line as well;

2.2.2 The baseline study will characterise the different ecosystems and habitats present at the SKA Site and along the three spiral arms. It will include all the unique and sensitive features identified, mapped and described on the SKA Site and along the three spiral arms as well as species lists of fauna, flora and ecological characteristics.

2.3 As part of the baseline assessment camera traps will be set up on site and monitored by SAEON;

2.3.1 Camera traps will need to be RFI tested and approved prior to deployment in accordance with the SRAO RFI Controls Policy.