Key messages

The SKA will be the largest and most sensitive radio telescope in the world.

The SKA project crosses geographical and political boundaries driven by the common goal of exploring our place in the universe.

The benefits of the SKA extend beyond radio astronomy.

Technology development with spin off applications (wifi, low power supercomputing, rapid detection and analysis applications like facial recognition and market monitoring).

Business and employment opportunities.

The potential to inspire the next generation of scientists and engineers.

Amazing SKA facts

The data collected by the SKA in a single day would take nearly two million years to playback on an iPod.

The SKA central computer will have the processing power of about one hundred million PCs.

The SKA will use enough optical fibre to wrap twice around the Earth!

The dishes of the SKA will produce 10 times the global internet traffic.

The aperture arrays in the SKA could produce more than 100 times the global internet traffic.

The SKA will generate enough raw data to fill 15 million 64 GB iPods every day!

The SKA super computer will perform $10^{18}$ operations per second – equivalent to the number of stars in three million Milky Way galaxies – in order to process all the data that the SKA will produce.

The SKA will be so sensitive that it will be able to detect an airport radar on a planet 50 light years away.

The SKA will contain thousands of antennas with a combined collecting area of about one square kilometre (that’s 1,000,000 square metres!).