Convention Square Kilometre Array Observatory Submission 6



1 October 2019

Committee Secretary Joint Standing Committee on Treaties PO Box 6021 Parliament House Canberra ACT 2600 jsct@aph.gov.au

Re: Letter in support of the Square Kilometre Array Observatory Convention

As Australia's Chief Scientist, multiple examples of the best, brightest and most cutting edge science and science projects across the world make their way to my inbox. Standout among these are the global 'mega science' projects: large scale, complex collaborations that span borders and political divides to answer questions too large for any one country to support alone.

The Square Kilometre Array Observatory (SKAO) is one of these mega projects. This inspiring international partnership aims to build and operate the world's premier, next generation radio observatory and will be the most powerful collection of radio telescopes in the world; all to answer the big questions in astronomy and fundamental physics research.

And Australia has a leading role to play. Under the proposed two-site model, the observatory will consist of telescopes co-hosted by Australia and South Africa, with its headquarters located in the United Kingdom. The Australian site will be hosted at the Murchison Radio-astronomy Observatory (MRO).

With every challenge comes the opportunity to innovate. In particular, the SKAO willproduce an unprecedented volume of data, creating opportunities for Australia to expand our capacity and capability in big data and data analytics. In a world of ever increasing connectivity, machine learning and even artificial intelligence, these capabilities are increasingly valuable and highly desired.

As co-host of the SKA Observatory, this is an opportunity to leverage and expand Australia's world-leading profile in radio astronomy research, and will bring significant scientific, economic, technological and human capital benefits. And another, non-measurable benefit: the opportunity to inspire our future generations of scientists, seeing Australia lead the way on a literally out-of-this-world project.

Facsimile: +61 2 6213 6558

Telephone: +61 2 6102 9210 Email: chief.scientist@chiefscientist.gov.au

Web: www.chiefscientist.gov.au

Yours sincerely,

Dr Alan Finkel AO