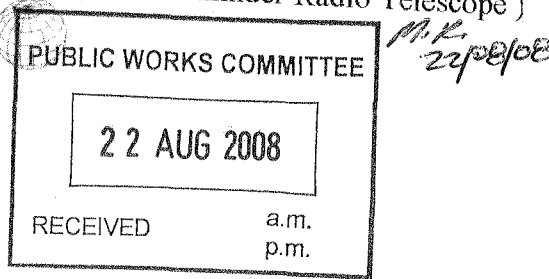




Submission No. 7
(SKA Pathfinder Radio Telescope)

SKA Program Development Office
Jodrell Bank Centre for Astrophysics
Alan Turing Building
The University of Manchester
Manchester
M13 9PL
UK

Tel: +44 (0)161 275 4055
Fax: +44 (0)161 275 4247
www.skatelescope.org



The Secretary
Public Works Committee
Parliament House
Canberra ACT 2600
Australia

Manchester, 21 August 2008

Dear Secretary,

Proposed Australian Square Kilometre Array Pathfinder (ASKAP) Radio Telescope

1. I am writing in my capacity as Director of the international SKA Program Development Office (SPDO) to express my full support for the proposal by CSIRO to construct ASKAP.
2. The SPDO was established by the international steering committee (SKA Science and Engineering Committee) to provide the overall leadership and management of the international development of the SKA program, focusing in particular on science, engineering and site issues. The SPDO is playing a major role in the European Commission-funded preparatory phase for the SKA (PrepSKA). It is the coordinator for a work package to generate a costed system design for the SKA by early 2012 in conjunction with the many institutes around the world carrying out state-of-the-art R&D in the contributing technologies. The SPDO also supports the site selection process and is coordinating a second PrepSKA work package which will further characterise the two candidate sites for the SKA, Australia and Southern Africa. The results of this work and that from other policy work packages in PrepSKA on governance, procurement and funding options will form the basis of a proposal to governments around the world for the implementation and construction of the SKA.
3. The SKA will be the largest ground-based astronomical facility ever built, and will transform our view of the universe. From 2007 to 2012, about €150 million will be spent around the world on R&D in SKA Pathfinder projects and Design Studies, with CSIRO-ATNF making a significant contribution to that effort through ASKAP. CSIRO-ATNF is a signatory to the PrepSKA project and will lead a number of tasks in the system design work, making use of the expertise being developed in the course of ASKAP.
4. Of particular interest to the international SKA community are the development within ASKAP of
 - innovative solutions for phased array feed receivers in the foci of the dish reflectors and the associated beamformers and other electronics,
 - the calibration of the performance of these new technologies,
 - innovative data analysis algorithm solutions and related software,
 - new solutions for sustainable power generation,
 - experience in operating a radio telescope at a site with low radio frequency interference,
 - experience in operating long distance high bandwidth optical fibre networks to transport data, and
 - experience in operating a remote radio astronomy observatory in testing environmental conditions.
5. Successful and timely demonstration of the innovative radio astronomy technologies developed in the ASKAP program is critical to the international program. As pointed out in the proposal, the lessons learnt in ASKAP will have maximum impact on design decisions in PrepSKA provided the project proceeds expeditiously.



Finally, let me say that I strongly support the ASKAP proposal. Its success is crucial both to the future of Australian radio astronomy and to the international SKA project as a whole.

Yours sincerely,

A handwritten signature in cursive script that reads 'Richard Schilizzi'.

Prof. Richard T. Schilizzi
Director, SKA Program Development Office