



International Centre for Radio Astronomy Research

Submission No. 008

(Pawsey Centre)

Date: 09/04/2010

SL

8 April 2010

Dear Public Works Committee,

RE: The Pawsey High Performance Computing Centre for SKA Science

In September 2009, the new International Centre for Radio Astronomy Research (ICRAR) was founded as a joint venture partnership between the University of Western Australia and Curtin University of Technology. ICRAR attracted \$20 million in WA State funds and more than \$80 as in kind and cash contributions from UWA and Curtin. ICRAR, along with the Murchison Radioastronomy Observatory (MRO) and the Australian SKA Pathfinder telescope (ASKAP), form the pillars of the Australian bid to win the SKA.

In 2009, a new and internationally significant component was added to the Australia SKA bid in the form of the Pawsey High Performance Computing Centre for SKA Science. The Pawsey centre will be designed, constructed and managed by the iVEC joint venture of which UWA and Curtin are members. The Pawsey Centre will be a world-class facility that will enable real time data processing from the facilities on the MRO, as well as more traditional supercomputing analysis and modeling tasks. Researchers at ICRAR are playing a leading role in the design and development of the Pawsey Centre and will use its resources for front line research and development in radio astronomy and data intensive science using MRO telescopes. The combination of MRO, ASKAP, the NBN links from Geraldton, the Pawsey Centre and ICRAR form a complete and powerful systems picture for the SKA with all the components necessary to deliver breakthrough science. ICRAR recognizes the magnitude of this potential and will actively support the development of the Pawsey centre through its membership in steering committees and design processes and the commitment of cash and staff resources to data intensive science and ICT developments using Pawsey facilities. ICRAR further recognizes the critical role the Pawsey Centre will play in the Australian bid and its ability to secure a major role for Australian researchers and industry in the development of the large ICT systems necessary for SKA.

ICRAR greatly appreciates the investment of Federal funding needed to build the Pawsey Centre as a world-class facility and we urge the Public Works Committee to approve the expenditure necessary to complete this development on a timescale commensurate with MRO operations and the SKA site negotiations.

Yours sincerely,

Prof. Peter Quinn, DIRECTOR

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