

## THE UNIVERSITY OF Western Australia

Achieving International Excellence

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## OFFICE OF THE VICE-CHANCELLOR

VICE-CHANCELLOR

Professor Alan Robson AM, CitWA BAgrSc *Melb.*, PhD *W.Aust.*, FTSE, FAIAS Hackett Professor of Agriculture

Our ref: F29445 (RO/2460/08/04/2010) Your ref:

7 April 2010

Committee Secretary Parliamentary Standing Committee on Public Works Department of House of Representatives PO Box 6021 Parliament House CANBERRA ACT 2600

## Dear Committee Secretary

## The Pawsey High Performance Computing Centre for SKA Science

The University of Western Australia is committed to becoming a world-class scientific research institution with a ranking in the top 50 universities worldwide within the next 40 years. To this end, the University has made a significant commitment to the development of radio astronomy in Western Australia and the Australia bid for the location of the Square Kilometer Array (SKA). In 2006, the University attracted two Premier's Fellows in Radio Astronomy and contributed more than \$2 million to their research programs and the establishment of the Astronomy and Astrophysics Department in the School of Physics. In 2009, the University successfully proposed to become the headquarters of the new International Centre for Radio Astronomy Research (ICRAR) in a joint venture partnership with Curtin University. ICRAR attracted \$20 million in WA State funds and more than \$80m 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 is a founding member. 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.

Office of the Vice-Chancellor, The University of Western Australia, M464, 35 Stirling Highway, Crawley WA 6009 Phone +61 8 6488 2808 Fax +61 8 6488 1013 Email Alan.Robson@uwa.edu.au 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. UWA recognizes the magnitude of this potential and will actively support the development of the Pawsey Centre through is membership of iVEC and ICRAR joint ventures. The University 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.

The University of Western Australia 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

Alan Robson Vice-Chancellor