Submission No. 1.2

(Australian SKA Pathfinder Radio Telescope)



CSIRO Australia Telescope National Facility Radiophysics Laboratory Cnr Pembroke & Vimiera Roads, Marsfield NSW 2122 PO Box 76, Epping NSW 1710, Australia Telephone: (02) 9372 4100 • Facsimile: (02) 9372 4310 • ABN 41 687 119 230



Our Ref:BJB/36-08

15 September 2008

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

Attention Mr James Catchpole

Dear Secretary

CSIRO notes the strong support for the ASKAP project expressed by Russell Speed of Geraldton. CSIRO has communicated regularly with relevant organisations in the Mid West to ensure adequate community awareness of the project.

A CSIRO Australia Telescope National Facility representative presented on ASKAP to a Mid West Science Summit on 13 August, 2008. Very constructive discussion ensued in a round-table session on methods to ensure maximum benefit is realised in the Mid West region from the ASKAP project. CSIRO notes comments in the submission on the strong community support for ASKAP expressed at the Science Summit.

CSIRO also notes the strong support from the City of Geraldton-Greenough for the siting of the Murchison Radio-astronomy Observatory (MRO) Support Facility in Geraldton, including the ASKAP supercomputer. CSIRO's project plan for ASKAP includes the siting of the MRO Support Facility, including the supercomputer for ASKAP, in Geraldton.

Dr Brian J Boyle Director CSIRO Australia Telescope National Facility



Our Ref:BJB/40-08

15 September 2008

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

Attention Mr James Catchpole

Dear Secretary

CSIRO notes the comments from the Yamatji Land and Sea Council that the organisation:

- Does not oppose the ASKAP telescope, and
- Wishes to make sure that the Yamatji Land and Sea Council can work together with all parties so that the project can maximise outcomes in relation to heritage and other benefits for each of the affected native title claim groups.

CSIRO plans to use AARNet as its contracting agent for the installation of the optic-fibre link between the Murchison Radio-astronomy Observatory (MRO) and Geraldton. AARNet will be required to obtain all the relevant approvals, comply with best-practice procedures for consultation and provide a plan that demonstrates their capacity, expertise and access to appropriate advice to ensure that all Native Title Act and other legislative requirements are complied with. All contractors used for the optic-fibre deployment will also be required to follow appropriate procedures.

The WA Office of Native Title has written to the Yamatji Land and Sea Council informing them that appropriate consultation processes with affected native title claimant groups will be undertaken by AARNet for the optic-fibre installation. The Office of Native Title has also clarified the distinction between the consultation procedures to be followed for the optic-fibre cable and the Indigenous Land Use Agreement that is being negotiated for the Murchison Radio-astronomy Observatory.

Yours sincerely



Our Ref:BJB/31-08

15 September 2008

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

Attention Mr James Catchpole

Dear Secretary

CSIRO notes the strong support from the Chair of the Australia Telescope Steering Committee for the ASKAP project. The Australia Telescope Steering Committee provides advice to me as the CSIRO Australia Telescope National Facility's Director on strategy and operations for the Australia Telescope National Facility's infrastructure, including CSIRO's existing radio astronomy infrastructure and ASKAP.

CSIRO also notes and endorses the positive words on the strong support for the project from the Government of Western Australia. CSIRO has been working with the Government of Western Australia on SKA siting since 1997. CSIRO has developed a strong and highly productive working collaboration with the Government of Western Australia.

Dr Brian J Boyle Director CSIRO Australia Telescope National Facility



Our Ref:BJB/32-08

15 September 2008

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

Attention Mr James Catchpole

Dear Secretary

CSIRO notes the very strong support from Cray Australia for the ASKAP project. CSIRO has very constructive collaborations with both IBM and Cray on aspects of ASKAP computation. The ASKAP team are on track to achieve the breakthroughs in processing power required to maximise the potential from ASKAP.

Yours sincerely



Our Ref:BJB/33-08

15 September 2008

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

Attention Mr James Catchpole

Dear Secretary

CSIRO notes the statements in the submission from Mark Paterson, Secretary of DIISR, that the Australian Government is currently seeking to position Australia to successfully bid to host the proposed SKA.

CSIRO also notes DIISR's comments on the importance of ASKAP as a critical part of Australia's overall strategy for bringing the SKA to Australia, and on the fact that ASKAP will be a world-leading telescope in its own right.

CSIRO has developed a close and effective working relationship with DIISR, and greatly appreciates the very effective work of the SKA Taskforce within DIISR in assisting CSIRO and the ASKAP team with a large number of matters associated with establishment of ASKAP and Australia's SKA strategy.

Dr Brian J Boyle Director CSIRO Australia Telescope National Facility



Our Ref:BJB/41-08

15 September 2008

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

Attention Mr James Catchpole

Dear Secretary

CSIRO notes the strong support from the Government of Western Australia for ASKAP and the SKA. CSIRO has developed a strong collaborative relationship with the SKA team within the WA Government over nearly ten years. The close and effective relationship continues to be maintained through the Team Australia mechanisms established in collaboration with the Commonwealth Government Department of Innovation, Industry Science and Research.

Yours sincerely



Our Ref:BJB/34-08

15 September 2008

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

Attention Mr James Catchpole

Dear Secretary

CSIRO notes the strong support for ASKAP expressed by Murchison Council. CSIRO has kept Murchison Council regularly informed about SKA and ASKAP activities for several years, through regular meetings with Council members, and through joint membership of WA radio astronomy advisory groups.

CSIRO greatly values and has benefitted from the strong support and helpful assistance provided by Murchison Council as we have developed the ASKAP proposal.

Yours sincerely



Our Ref:BJB/35-08

15 September 2008

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

Attention Mr James Catchpole

Dear Secretary

CSIRO notes and endorses the description of the history of CSIRO's collaboration with the MWDC in the submission from the MWDC to the PWC Secretariat. The Mid West Development Commission has provided valuable support to CSIRO over many years in areas such as advice on geophysical conditions in the Mid West, facilitating contact with industry, the pastoral community and local Councils, as well as project level support, including for the international SKA conference held in Geraldton in 2003.

The Mid West Development Commission is providing in-kind support to ASKAP through provision of office space and administrative support for the ASKAP Regional Manager based in Geraldton. The resulting close physical links between the ASKAP Regional Manager and the Mid West Development Commission continue to facilitate the strong collaboration between the Commission and CSIRO.

CSIRO and the MWDC both have representation on the Australian SKA Coordination Committee WA Regional Stakeholder Advisory Group, which provides an additional valuable source of regional advice to CSIRO on SKA and ASKAP matters.

CSIRO greatly values the support it continues to receive from regional WA for development of radio astronomy in the State.

Yours sincerely



Our Ref:BJB/37-08

15 September 2008

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

Attention Mr James Catchpole

Dear Secretary

The ASKAP science case has been developed in close collaboration with the international SKA community, facilitated by a number of international science workshops and discussion and analysis within the ASKAP Science Working Group. CSIRO expects strong international demand for results from ASKAP once the facility is operational and a Science User Policy is currently being developed by the ASKAP team in collaboration with the Science working Group.

CSIRO notes the strong support for ASKAP expressed by the international Science Working Group and confirms that the principal science drivers identified by the group as priorities for ASKAP science investigations are the science drivers that have been identified by the technical ASKAP team within CSIRO.

Dr Brian J Boyle Director CSIRO Australia Telescope National Facility



Our Ref:BJB/38-08

15 September 2008

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

Attention Mr James Catchpole

Dear Secretary

CSIRO notes the comments from the international SKA Program Development Office (SPDO) expressing full support for the proposal by CSIRO to construct ASKAP.

The SPDO has a critical role to play over the next four years in coordinating studies into both the technology and site to be selected for SKA. Both Australia and South Africa are shortlisted as candidate sites for the SKA and both countries are establishing pathfinder facilities on their candidate sites. Results from the pathfinders will provide essential input into the site characterisation work package referred to by Richard Schilizzi. CSIRO notes the comments from the SPDO that:

- the results of the site characterisation work and other work packages will form the basis of a proposal to governments around the world for the implementation and construction of the SKA, and
- the lessons learnt in ASKAP will have maximum impact on design decisions in PrepSKA provided the project proceeds expeditiously.

ASKAP's current project planning incorporates the requirement to have initial science from the 6-dish test array at Boolardy in 2010.

Dr Brian J Boyle Director CSIRO Australia Telescope National Facility



Our Ref:BJB/39-08

15 September 2008

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

Attention Mr James Catchpole

Dear Secretary

CSIRO notes the statements from the Wajarri Yamatji Native Title Claim Group that the Wajarri Yamatji people:

- Do not oppose the ASKAP telescope
- Wish to ensure that the project can help with employment, training and other benefits for the Wajarri Yamatji people
- Are unclear on what the impact of the full SKA may be if it is sited on their traditional lands
- Wish to participate together with Government on the project.

The WA Office of Native Title is currently leading negotiations with the Wajarri Yamatji Native Title Claim Group to establish an Indigenous Land Use Agreement to enable use of the Murchison Radio-astronomy Observatory site for radio astronomy, including ASKAP. These negotiations are in-confidence, and address the issues raised above by the Wajarri Yamatji Native Title Claim Group. CSIRO is attending meetings with the claim group, has submitted documentation to the Claim Group outlining opportunities arising from the project, and has agreed, in principle, to be a party to the ILUA.

The ILUA under current negotiation is in relation to use of the land for ASKAP and associated activities. A separate negotiation will need to be conducted, if appropriate, for SKA. It is not possible, at this stage, to specify in detail what the impact of SKA will be, as the realisation of SKA is still being determined by the international community.

CSIRO has run and is continuing to run science education programs in the remote schools in the Murchison that have a significant indigenous population. Overnight astronomy viewing sessions have been held at Pia Wajarri remote community and have been enthusiastically received by students and community leaders. CSIRO has discussed employment opportunities in ASKAP with the Wajarri Yamatji people and has identified a number of employment opportunities.

CSIRO has discussed with Geraldton TAFE use of their mobile training facility to design and take specific training programs to the Pia Wajarri community to maximise opportunities for the local indigenous people to benefit from the opportunities the project will bring to the remote region. CSIRO has requested of all scientists reporting results from the candidate site that the Wajarri Yamatji people be appropriately acknowledged.

CSIRO values its interaction with the Wajarri Yamatji people in regard to the ASKAP project and as part of developing its broader indigenous engagement strategy.

Dr Brian J Boyle Director CSIRO Australia Telescope National Facility