

**Australian Square Kilometre Array
Industry Consortium**

**Senator Kim Carr
Minister for Innovation, Industry, Science and Research**

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Thanks, John [Humphreys] for your introductory remarks, and thank-you all for the chance to meet with you and talk about one of the twenty-first century's most exciting science projects, the Square Kilometre Array.

It is great to see so many high-profile companies and research organisations supporting Australia's SKA bid.

As you know, our campaign is led by Professor Boyle.

Brian has a well-deserved international reputation for his work in astronomy – work that was recognised with a Centenary Medal in 2003 and the Gruber Cosmology Prize last year.

His outstanding leadership has got Australia's SKA bid where it is today.

My own experience is that Brian is a pleasure to work with, and that's an experience I want everyone here to share.

Many members of the Australian SKA Industry Consortium are fierce competitors here on earth – but they are collaborating to maximise Australia's chances of hosting this bold foray into the heavens.

A united and enthusiastic business community is a major asset to Australia's bid.

This unique consortium is playing a huge part in building that unity and enthusiasm – and more generally in promoting industry engagement in a truly iconic project.

It was pleasing to see your work recognised in the *Australian Financial Review* yesterday – but the best is yet to come.

The SKA

The Commonwealth is totally committed to Australia's SKA bid, and it's not hard to understand why.

The SKA is a huge economic opportunity – a \$2 billion opportunity – and we'd be foolish to ignore that.

But it is also a great scientific opportunity, a great innovation opportunity – an opportunity to revolutionise Australia's technological capabilities and the world's understanding of the universe.

This is a project to fire the imagination, and I have no doubt that your presence here says as much about your spirit of adventure as it does about taking care of business.

The SKA is one of the largest mega-science projects ever conceived:

- comparable to the Large Hadron Collider outside Geneva
- comparable to the International Thermonuclear Experimental Reactor under construction in France.

It has ambitious scientific goals, ambitious technical requirements, and an ambitious lifespan.

Are the times right for this kind of ambition? I think they are.

Yes, the world is going through some turbulent times just now.

The economic outlook is uncertain and many Australians are worried about the future.

But as far as I'm concerned, that means we need more innovation, science and research – not less.

We need innovation that will make us more productive and competitive.

We need science that will drive the development of new technologies and new industries.

We need research that will help us deal with the huge challenges we face.

That means we must continue to invest in Australian capabilities.

It also means we must strengthen our overseas networks and work closely with international collaborators.

We want to see Australia become an integral part of the global innovation system.

That's why the SKA is so important.

Whoever wins the right to host the telescope, making it work will require a genuine international effort.

Industry opportunities

The Large Hadron Collider demonstrates the spill-overs projects on this scale can generate, and the benefits they can deliver to high-technology and high-value-added industries.

Everyone here is familiar with the industry opportunities the SKA will create – in super-computing, high-speed networking, advanced manufacturing, infrastructure, construction, transport, logistics, and green energy for remote areas.

We want to capture as many of those opportunities as we can for Australia – bearing in mind that we are just one of several countries joined in this endeavour.

To do that, we need government, science and industry working together with a common purpose.

That's the key to winning work on the project, the key to winning hosting rights, and the key to boosting Australia's innovation capacity and developing knowledge-intensive industries more generally.

The Commonwealth and the Government of Western Australia are serious about getting industry involved.

We want to ensure that Australian business has the information it needs to make the most of the opportunities the project will offer – with your help.

We will also be looking to industry for advice on Australia's participation in the international SKA Preparatory Study.

This is a three-year inquiry to identify governance, funding and procurement options for the SKA.

The study may well determine what opportunities are available to Australian industry, so it is important that we make our views known.

ASKAP

As you know, the centrepiece of Australia's bid strategy is the Australian SKA Pathfinder.

This will be an internationally significant radio telescope in its own right.

The science case for the Pathfinder is very exciting, and it promises to make Australia a global hub for survey radio-astronomy.

It will dovetail perfectly with initiatives such as the new Radio Astronomy Research Centre being established at the University of Western Australia and Curtin University with support from the Western Australian government.

The Pathfinder also gives Australian firms the chance to show they can develop high-end technologies applicable to the SKA itself – thereby putting themselves in the box-seat to win work on the big project.

CSIRO will be looking for about \$60 million worth of Pathfinder inputs from industry over the next couple of years.

That sounds like a lot of money to me, but there are some very big companies represented here, and the Pathfinder contracts may be small by your standards.

Please don't let that put you off.

Astronomy and sport have one thing in common – if you don't turn up for training, you don't get a game.

That's why it is so important that we get the Pathfinder right, and so important that all members of this consortium think about what they can contribute.

The fact that you are here suggests you are probably already converted to that view.

We will shortly be inviting tenders for the fibre-optic link from Geraldton to the Pathfinder site.

This is just part of that \$60 million I mentioned.

We want all qualified Australian companies to bid – and remember, you've got to be in it to win it.

To maximise participation, CSIRO has just published an Australian Industry Participation Plan and an Industry Opportunity Register for the Pathfinder.

We are also working with Western Australia and the Industry Capability Network to identify potential Pathfinder suppliers and give them the background they need to tender effectively.

The future

The Square Kilometre Array is a fantastic project – a project Australia should be involved in whichever site is chosen.

That doesn't mean I won't go on arguing fiercely for our site, which I think is clearly the best.

I've spent the last year advancing our case at every opportunity – in Australia, in Europe and the in United States.

The prime minister has done the same, and our diplomatic missions around the world are all out there pitching for the bid.

It would surprise me very much if our new Chief Scientist – herself a leading astronomer – doesn't also use her office to champion Australia's cause.

Professor Sackett's links to the SKA go back to 2001.

We have our friends in New Zealand working with us and we have Australian industry working with us.

That's a very strong combination.

The Square Kilometre Array is a once-in-a-lifetime opportunity.

Let's make the most of it.