

**Economics Legislation Committee**  
**ANSWERS TO QUESTIONS ON NOTICE**  
Industry, Innovation, Climate Change, Science, Research and Tertiary Education Portfolio  
Budget Estimates Hearing 2013-14  
3 and 4 June 2013

---

**AGENCY/DEPARTMENT:** DEPARTMENT OF INDUSTRY, INNOVATION, CLIMATE CHANGE, SCIENCE, RESEARCH AND TERTIARY EDUCATION

**TOPIC:** SKA funding

**REFERENCE:** Question on Notice (Hansard, 3 June 2013, pages 100 and 101)

**QUESTION No.:** BI-30

**Senator COLBECK:** How much was spent on the total bid phase of the project?

**Ms Kelly:** I think we will have to take that on notice.

**ANSWER**

Table 1. Expenditure on SKA Taskforce

Table 1 shows expenditure to establish a unit within the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (and predecessors) to facilitate SKA-related activities in Australia, including the host bid, up to the site decision.

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	<b>Total</b>
Funds allocated to SKA Taskforce (\$m)	1.5	1.1	1.3	1.1	3.891	2.393	<b>11.284</b>

Table 2. Expenditure incurred on the siting proposal

Table 2 shows estimated expenditure incurred in responding to the SKA Organisation's request for SKA siting proposals (i.e. the SKA Site Selection Group (SSG) Request for Information (RFI) from candidate sites issued on 25 May 2011). The table below provides an estimate of expenditure incurred in responding to the RFI.

	<b>Estimated cost (\$m)</b>
CSIRO <sup>1</sup>	0.415
DIICCSRTE <sup>1,2</sup>	0.42
Externally contracted work	0.567
<b>Total</b> <sup>3</sup>	<b>1.402</b>

*Notes:*

1. Estimate based on resources specifically allocated to undertake preparation of the site proposal within CSIRO and DIICCSRTE. Other agency resources that may have been used in the process are not estimated.

2. Estimate overlaps with the taskforce funding shown in Table 1.

3. Pro-bono work was contributed by a range of organisations including (but not limited to)– ICRAR (Curtin University, UWA), Cisco Systems Australia Ltd, AARNet, ASKAIC, iVec, Horizon Power, Western Power and various universities in Australia and New Zealand. A number of agencies in the Commonwealth, WA Government and New

*Zealand provided information and input towards the bid. The cost of these resources has not been estimated. The estimate does not include expenditure in relation to the initial 2005 site shortlisting process (funded largely by CSIRO) or other work done prior to the RFI to prepare for a hosting bid.*

**Table 3. Expenditure on infrastructure directly related to the SKA bid**

The Government signalled its intention to bid to host the SKA when it announced funding of \$56.7 million in the 2007 Budget for CSIRO to construct the Australian SKA Pathfinder telescope and to establish an SKA taskforce within the then Department of Education, Science and Training. Table 3 shows Commonwealth expenditure on infrastructure directly related or attributable to the Government's bid to host the SKA.

<b>Commonwealth infrastructure funding directly related to SKA-bid</b>	<b>Funding allocation (\$m)</b>
Establishment of Murchison Radio Astronomy site (purchase of Boolardy lease and Indigenous Land Use Agreement) <sup>1</sup>	4.2
ASKAP design and construction <sup>2,3</sup>	148.5
<b>Total</b>	<b>152.7</b>

Notes:

- 1. WA Government funding of \$13.6m has also allocated for establishment of the MRO site. This amount is not shown in the table.*
- 2. The total budget for ASKAP Phase 1 is \$164.3m – which includes \$15.8m in funding provided by the WA Government.*
- 3. Commonwealth component of ASKAP budget comprises a combination of 2007 budget, NCRIS scheme, EIF scheme and CSIRO internal funding.*

**Table 4. Expenditure on other relevant infrastructure initiatives**

Table 4 shows expenditure on infrastructure not directly attributable to the SKA bid – but which was relevant to it and was drawn upon in the siting proposal

<b>Commonwealth infrastructure funding indirectly related to SKA-bid</b>	<b>Funding allocation (\$m)</b>
Pawsey Centre for SKA Science <sup>1</sup>	80.0
Murchison Wide-Field Array telescope	12.0
Pawsey geothermal project	19.8
Perth-Geraldton optic fibre backhaul link <sup>2</sup>	25.0
Fibre connection upgrades to Pawsey Centre	8.3
<b>Total</b>	<b>145.1</b>

Notes:

- 1. Around 25% of the Pawsey Centre capability will be utilised for radio astronomy purposes – including data processing for ASKAP. The remaining 75% will be used for non-astronomy purposes such as earth sciences. Pawsey may host the SKA Phase 1 data processor.*
- 2. Estimate only.*

**Table 5 – Expenditure on SKA-related activities not directly related to the site bid**

Table 5 shows Commonwealth expenditure on SKA-relevant activities allocated during the bid period not directly relevant to the bid.

<b>Commonwealth funding related to the SKA – but not relevant to the site bid</b>	<b>Funding allocation (\$m)</b>
Centre for Excellence for All-Sky Astronomy (CAASTRO) (ARC centres funding to University of Sydney)	20.0
<b>Total</b>	<b>20.0</b>

Note: *WA Government has also funded SKA-related research capability initiatives in that state.*