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# Position Details

## General Management – CSOF8

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| The following information is for applicants | |
| Advertised Job Title | SKA Program Leader |
| Job Reference | 77254 |
| Tenure | Specified Term of 3 years  Full-time or Part-time (min hours required) |
| Salary Range | CSOF7 or CSOF8 (pro-rata for part-time), market salary considered on negotiation  plus up to 15.4% superannuation |
| Location(s) | Perth or Sydney |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents |
| Position reports to the | Director/Deputy Director, S&A |
| Client Focus – Internal | 50% |
| Client Focus – External | 50% |
| Number of Direct Reports | 0 |
| Enquire about this job | Contact Fern Seto via email at fern.seto@csiro.au |
| How to apply | Apply online at <https://jobs.csiro.au/>  Internal applicants please apply via **Jobs Central**  If you experience difficulties when applying, please email [careers.online@csiro.au](mailto:careers.online@csiro.au) or call 1300 984 220. |

### Background

The Square Kilometre Array Observatory (SKAO) is a next-generation global radio-astronomy facility that will revolutionise our understanding of the Universe and the laws of fundamental physics. It is one observatory with two telescopes – SKA-Low in Western Australia and SKA-Mid in South Africa. Australia is a co-host member of the SKAO, an intergovernmental organisation headquartered at Jodrell Bank (near Manchester in the United Kingdom) responsible for SKAO construction and operation globally.

The first phase of the SKA will consist of two telescopes:

* Australia will host the SKA’s low-frequency telescope (SKA1-Low). SKA-Low will comprise up to 131,072 antennas in clusters along spiral arms spanning 65 km at CSIRO’s Murchison Radio-astronomy Observatory (MRO) in Western Australia.
* South Africa will host the mid-frequency telescope (SKA-Mid). SKA-Mid will comprise up to 197 dishes spread along spiral arms spanning 150 km.

CSIRO is involved in several facets of the SKA-Low in Australia:

* Operating partner: SKAO will partner with CSIRO to operate the SKA-Low Telescope and support construction.
* Construction: CSIRO has been allocated work in digital processing, infrastructure, and antenna station management and deployment, integration and verification, and software.

CSIRO also operates the MRO which hosts multiple national and international radio astronomy telescopes and is where the SKA-Low Telescope will be located.  CSIRO is responsible for land management, subleases, maintaining radio quiet protections, provision of services to the telescopes, and managing the Indigenous Land Use Agreement.

### Role Overview

The CSIRO SKA Program Leader is responsible for the day-to-day oversight and coordination to ensure that CSIRO successfully delivers its portfolio of obligations towards the SKA Observatory (SKAO) and the Australian Government.

The CSIRO SKA Program Leader is CSIRO’s Mission Assurance lead. They work to ensure that CSIRO’s SKA activities and obligations are successfully delivered throughout the complex and lengthy SKA construction period leading to SKA Low telescope operations, whilst ensuring CSIRO’s core interests are upheld. In this coming period CSIRO must develop SKA Low telescope operational processes and capability for the SKAO for the long term (20-50 years). The long-term operational relationship with an IGO will be unique for CSIRO, and for Australia. It will also offer new opportunities for Space & Astronomy, and its Australian University partners, to engage in the SKA’s Observatory Development Program (ODP).

As a member of the Executive, the SKA Program Leader will participate in the Business Unit’s strategic activities to ensure its ongoing growth and success in the era of the SKA.

The role coordinates all CSIRO’s SKA obligations, spanning three interconnected aspects -

1. Management of the Murchison Radio-astronomy Observatory (MRO) and ensuring that the obligations of Australia as an SKA Host are fulfilled. CSIRO’s obligations also include land management, infrastructure management, radio quiet advice, external stakeholder management and delivery of aspects of the Indigenous Land Use Agreement.
2. The successful delivery a suite of technical SKA construction contracts (2021-2028). These contracts include major infrastructure provision and integration, digital systems and software (CSP), Integration and verification (AIV), computing software systems (SHDP) and some smaller contracts focussing on RFI site monitoring, networking etc. supporting
3. Establishment and delivery of the SKA Low Telescope collaboration between SKAO and CSIRO. The formal Collaboration Agreement is currently in negotiation (2021). It will define the terms and conditions for the SKA for first 10 years of operation in Australia.
4. Facilitating SKA computing though CSIRO’s role supporting operations of the Pawsey Supercomputing Centre
5. Participation in the Australian SKA Regional Centre (AusSRC) will be Australia’s part of a global computing and data delivery network that will enable ground-breaking science by providing the connection between the telescope and the SKA science community

The CSIRO SKA Program Leader ensures that CSIRO has the appropriate regular, internal communications in place covering all aspects of CSIRO’s SKA obligations. The role will provide the central point of information/direction for all of CSIRO’s SKA activities and enterprise support services (ESS), remaining alert to success and risk developments, focussing on those at high level and/or spanning more than one SKA activity.

This role ensures that CSIRO maintains a unified communications path to its stakeholders and the SKA Organisation. This role supports all of CSIRO’s SKA activities and will liaise closely with the SKA Office in the Department of Industry, Science, Energy and Resources (DISER), the SKA Organisation, and other partners and stakeholders.

### Duties and Key Result Areas

The primary roles of this position are as

* the active coordinator of all CSIRO’s SKA related activities. This includes ensuring planning and execution of obligations delivered by S&A alone as well as those requiring contribution from other parts of CSIRO.
* the central point of contact between SKAO and CSIRO on matters which are not managed via the formal contracting process for operational and construction activities.
* the central point of contact at CSIRO to DISER’s SKA team on matters which are not managed via the formal contracting process for site activities.

This position has financial and programmatic oversight responsibilities for CSIRO’s SKA portfolio of activities and reporting on same. For an initial period (first 12 months), this includes management of DISER-SKAO/CSIRO contracts covering the ‘transition to construction’ activities, as well as providing support and advice to the SKA construction program and project managers as they each negotiate the terms for CSIRO’s major SKA construction contracts.

* **Leadership of the Business Unit’s SKA program of activities**

This role establishes and enacts the CSIRO SKA Program plan (for the period 2021-2028) to ensure that S&A has clear sight of its CSIRO SKA obligations, and that there is effective communication to all participants in the endeavour. The CSIRO SKA Program plan (2021-2028) incorporates all of CSIRO’s obligations and work plan. This plan is the basis by which the CSIRO SKA Governance Group is updated, with an emphasis on the tracking of Enterprise resources to deliver CSIRO’s SKA obligations.

* **Liaison and Communication to Stakeholders (DISER, WA)**

This role acts as a trusted advisor, utilising knowledge of stakeholders needs regarding the SKA in Australia. The role will also be proactive in promoting innovation and technology (IP) returns to Australia from CSIRO’s SKA activity.

* **Liaison and Communication to SKAO**

Along with the S&A Director, this role is one of the primary coordination and communication points with the SKA Low Telescope Director’s office. This role maintains excellent relationships with the SKA Low Telescope Director and their deputy, working in a spirit of true partnership to deliver the Low Telescope and services.

* **Promoting CSIRO’s SKA future opportunities**

This role contributes to the forward strategic direction of the business unit and helps to build CSIRO’s strategy for telescopes on the MRO site.

Communicates CSIRO’s SKA efforts to external partners and the scientific community through oral and written reports.

Provides advice to policy makers and inform and transfer knowledge to non-scientific audiences.

Deputize for the S&A Director on SKA matters where appropriate.

* Be a senior member of the Business Unit or may lead a team within the Business Unit.
* Participate in, and may lead, cross-functional task forces/policy bodies and committees to provide and gain a broader corporate perspective.
* Share expertise and develop the professional skills of others across the Organisation, including setting and achieving the desired standard.
* Form partnerships with Senior Managers, and collaborate with other support functions, to deliver outcomes to the Organisation.
* Responsible for providing high-level strategic and tactical advice with significant organisational implications, which may also impact on the broader research community.
* Exercise influence over other (often more senior) staff.
* Forecast potential influences on the Business Unit’s or the Organisation’s operating environment.
* Identify, and where appropriate, act on trends of significance, developing and introducing strategies that position the Organisation to deal with the challenges ahead.
* Direct the investigation and solution of complex conceptual and other broad-ranging management problems.
* Work with a long-term perspective when addressing clients’ needs and balance immediate and long-term benefits to develop strong cooperative relationships with industry and/or government bodies.
* Make representations on behalf of CSIRO to industry and the government.
* Communicate openly, effectively, and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, regionally dispersed team to carry out tasks in support of CSIRO scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Values, Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
* Other duties as directed.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. Bachelor’s/Master's degree in a scientific or technical discipline in conjunction with demonstrated achievement in senior advisory and managerial roles, ideally with postgraduate managerial qualifications.
2. Proven ability to communicate with, influence and motivate staff while working in an uncertain and complex regulatory environment.
3. Excellent English oral and written communication skills, with the ability to present in public forums to a diverse audience.
4. A history of establishing and leading cooperative teams, promoting diversity and inclusion, and a record of strong leadership that has contributed to or defined policy direction and strategy.
5. Proven ability to foster effective relationships, using complex influencing strategies to ensure alignment between client or stakeholder needs and CSIRO’s objectives.
6. Demonstrated ability to anticipate and successfully manage major conceptual scientific, technical, commercial or management problems, which have a significant impact at a Business Unit or Organisational level.

## **Desirable**

1. Demonstrated experience interacting with a broad community of individuals, including indigenous groups.
2. Experience in the construction and/operation of large‐scale astronomical or science research facilities.
3. Current drivers licence.

## **Required Competencies**

* **Teamwork and Collaboration:** Creates and fosters an environment in which there is a high level of cooperation within and between teams. Facilitates positive team relationships to build organisational interaction across CSIRO.
* **Influence and Communication:** Uses complex influencing strategies, for example, assembling strategic coalitions, building behind the scenes support and the tactical use of information to gain support.
* **Resource Management/Leadership:** Contributes to or defines Business Unit / organisational policy directions, strategic planning and operationalises the vision for staff and gains commitment to the direction chosen. Plans, seeks, allocates resources and monitors to achieve outcomes. Adopts a mentor role.
* **Judgement and Problem Solving:** Resolves major conceptual scientific, technical, commercial or management problems, which have a significant impact upon the field of research, professional function, the Business Unit or the Organisation. Situations faced have little or no precedent and require original concepts and approaches.
* **Independence:** Commits significant resources in the face of uncertainty and takes calculated risks to improve performance and achieve challenging goals. Uses personal energy to drive change strategies. Formulates and implements contingency plans to minimise the impact of potential risks. Accepts personal responsibility for the outcomes of decisions/risks taken.
* **Adaptability:**Is flexible in response to external change or when faced with external constraints. Identifies and promotes the opportunities arising as a result of change.

Special Requirements

* The successful candidate will be asked to obtain and provide evidence of a National Police Clearance or equivalent. Please note that individuals with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
* The ability and willingness to undertake travel to the MRO (~700km north of Perth) the Science Operations Centre in Perth, as well as national and international travel as required

## **About CSIRO**

We solve the greatest challenges through innovative science and technology. Visit [CSIRO Online](http://www.csiro.au/) and [Space and Astronomy](https://www.csiro.au/en/Research/Astronomy) for more information.

CSIRO is a values-based organisation.  In your application and at interview you will need to demonstrate behaviours aligned to our values of:

* People First
* Further Together
* Making it Real
* Trusted