# Position Details

## Research Management- CSOF7

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| The following information is for applicants | |
| Advertised Job Title | Systems Engineering Manager, Canberra Deep Space Communication Complex (CDSCC) |
| Job Reference | 99905 |
| Tenure | Indefinite, Full-time  Position will also be considered as part-time (minimum 0.9 FTE) or 1.0 FTE with a compressed 9-day fortnight arrangement |
| Salary Range | AU$157,833 – AU$174,631pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Tidbinbilla – Canberra Deep Space Communication Complex, ACT |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian Citizens  Australian Permanent Residents |
| Position reports to the | Director, CDSCC |
| Client Focus – Internal | 70% |
| Client Focus – External | 30% |
| Number of Direct Reports | 3 |
| Enquire about this job | Contact Kevin Knights via email at [Kevin.Knights@csiro.au](mailto:Kevin.Knights@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. |

**Acknowledgement of Country**

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our [vision towards reconciliation](https://www.csiro.au/en/about/Indigenous-engagement/Reconciliation-Action-Plan).

### About CDSCC

Under an Agreement between the Australian and United States Governments, CSIRO has management responsibility for the activities of the National Aeronautics and Space Administration (NASA) in Australia. The principal activity is the operation of the Canberra Deep Space Communication Complex (CDSCC) located at Tidbinbilla, some 40 km from Canberra. CDSCC supports ground-based telecommunications as part of the international National Aeronautic Space Administration (NASA) Deep Space Network (DSN), under contractual arrangements between NASA and the Commonwealth Scientific Industrial Research Organisation (CSIRO). CDSCC is one of three similar complexes that together with the Network Operations Control Centre at the Jet Propulsion Laboratory (JPL) – based in the US - constitute NASA’s global DSN. JPL manages and operates the DSN for NASA. Visit [CDSCC Online](https://www.cdscc.nasa.gov/) for more information.

**Role Overview**

Reporting to the Director CDSCC and as a member of the CDSCC Management Team, the Systems Engineering Manager works collaboratively as part of a multi-disciplinary team in support of the CDSCC. The position will be required to interact with and influence staff, customers, and stakeholders at both operational and executive level.

The Systems Engineering Manager works under limited direction, providing high level advice on complex technical and engineering/information technology matters both on site and across the Deep Space Network (DSN). Extensive technical knowledge is required in order to provide innovative solutions to complex problems. The Systems Engineering Manager leads both the Engineering and ICT team and is responsible for critical decision making for site systems under their purview in accordance with DSN standards and CDSCC/CSIRO policies and procedures.

The role will require a level of flexibility to accommodate meetings outside the standard band of hours to reflecttime zones of our customer (JPL/NASA).

### Duties and Key Result Areas

* Set strategy and project goals to manage the activities of the Systems Engineering Group at CDSCC including the Engineering Team, Information and Communication Technology Team (ICT), and IT/Cyber Security related matters.
* Provide specialist technical expertise and leadership to the group.
* Coordinate the efforts of professional and technical staff to undertake research and investigative work.
* Provide advice and undertake activities/reporting as a member of the CDSCC senior management team.
* Coordinate activities and be accountable to ensure compliance with network wide standards, liaising with both internal and external stakeholders.
* Participate in DSN technical reviews and provide assessment based on expertise regarding new DSN project proposals.
* Ensure that systems maintenance is conducted in accordance with maintenance and tracking schedules in order to maintain all systems to JPL/NASA specified performance characteristics, including System Performance Testing and Calibration.
* Delivery of DSN projects and upgrades to operational systems for which the group is responsible.
* Manage activities related to the CDSCC airspace exclusion zones.
* Technical oversight of Radiation Safety Management for the complex.
* Support the CDSCC Operations and Spectrum Manager in matters related to the regulation of Frequency Spectrum Management including licensing, monitoring for radio frequency interference and engagement with the appropriate regulatory organisations and forums.
* Responsible for activities and projects related to all CDSCC ICT (both flight and administrative LANs) and IT/Cyber Security related matters.
* Oversee the Engineering Change Management process in accordance with DSN policies and procedures.
* Manage the Systems Engineering group budget within guidelines.
* Foster an environment in which there is a high level of cooperation within and between teams and facilitate positive team relationships.
* Adhere to CSIRO’s Code of Conduct, HSE policy and procedure, and Diversity, Inclusion and Belonging initiatives.
* Other duties as directed.

## **Selection Criteria**

#### Essential

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

1. Tertiary qualifications in a relevant Engineering and/or Information Technology field.
2. Broad experience in Systems Engineering /ICT management, and the delivery of complex engineering outcomes on time and to budget.
3. A strong history of establishing and working effectively in teams, encouraging new ideas, building trust, and providing support for the development of emerging skills.
4. Demonstrated experience providing innovative solutions, project management and related change management activities.
5. Proven ability to think strategically and balance long term planning with short term operational activities and goals.
6. Demonstrated experience in ensuring safe working practices.

**Desirable:**

1. An understanding of the technologies, functions and unique attributes associated with spacecraft radiocommunications.
2. Experience related to IT and Cyber Security technologies and practices.
3. Experience with regulatory processes and related technical matters in the areas of Spectrum Management, Airspace regulation, and Radiation Safety Management.

## **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 interactions across Business Units and the organisation.
* **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:** Provides leadership that fosters an environment that encourages new ideas and provides support for the development of emerging skills. Creates trust by displaying consistency, understanding, integrity and patience. Plans, seeks, allocates and monitors resources to achieve outcomes.
* **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 successful candidate will require the ability to travel domestically and internationally.
* As the CDSCC site works directly with NASA and JPL, the successful applicant will be required to obtain an Export Administration Regulations (EAR) clearance/approval.
* Eligibility for registration of the Institute of Engineers Australia (IEAust) or equivalent professional body.
* Hold a current Class ‘C’ Australian Driver’s Licence (or equivalent)

## **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