



Job Profile

SCADA Project Engineer

Group: Finance, Commercial & Digital

Job Summary

To be completed by People and Culture team			
Job Family	Engineering	Career Stage	E
Job Function	Generalist Engineering	Career Stream	Professional
Coverage EA = Enterprise Agreement ICE = Individual Contract of Employment	ICE	Last Modified Date	3/06/2022
To be completed by Manager ~ (Team Size relates to People Leadership)			
Work Environment	Hybrid	Team Size	
People Leader	No	Indirect Team Size	

Who we are

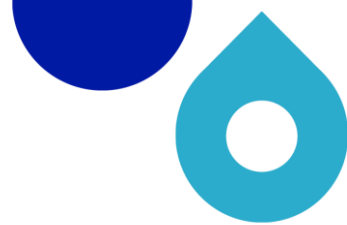
At Sydney Water, we exist for our customers. We're more than 3,500 people working together, striving to do more and be better—better for the environment, our customers, our people, and our water. Our people are passionate about working together, and driving agility, accountability, innovation, sustainability, and exceptional customer experiences.

Sydney Water is the main provider of water, wastewater, recycled water, and stormwater services in Greater Sydney. Our employees are dedicated to our customers, ensuring services are reliable and affordable, we are proactive and easy to engage with, forward-thinking, and environmentally focused.

Working with us means helping to provide essential services, safeguarding Sydney's future with a sustainable water supply, and protecting our iconic waterways. Our strategy guides our journey to enhance customer outcomes and continue delivering robust services to our city into the future.

Job Purpose

To manage IICATS/SCADA projects including design, planning and delivery of operational technology, testing, site audit, and commissioning. Perform compliance checks of SCADA systems from perspective of standards and performance. Assist in evaluation of SCADA technologies and development of SCADA strategy and standards. To manage technical activities associated with the planning and delivery of IICATS/SCADA technology, including site audit and commissioning programs. To manage IICATS/SCADA projects. To provide detailed consulting advice and assistance to clients and contractors on technical aspects of IICATS/SCADA.



Job Specific	• Manage delivery of projects to time, cost and quality standards. • Prepare detailed investigation reports on IICATS/SCADA engineering aspects of projects, including carry out site investigation and audit, project scope definitions and technical/commercial inputs to business case preparation. • Assist in developing option reports and cost/benefit analysis for IICATS/SCADA component including preparation of IICATS/SCADA concept reports. • Assist /Define customers in defining their requirements for IICATS/SCADA technology and ensure that these requirements are accurately reflected in the installed technology. • Prepare Technical Specification and Contract documents. • Review design drawings and works to ensure compliance with electrical, communications codes and SWC's IICATS/SCADA/I&C standards. • Participate in the review and update of the SWC I & C Standards as required. • Provide technical support and advice relevant to the project. Facilitate resolution of technical issues related to instrumentation & automation technology by hands on troubleshooting. Liaison with vendors & developers • Participate in determining client requirements and co-ordinate preparation and review of Control & Monitoring • P&IDs, Process Functional Descriptions and Functional Design Specifications. • Assist in Planning the project, particularly audit, testing, FAT, SAT and commissioning and other matters relevant to the project. • Support and advise OT staff during commissioning. • Audit/review contractor field activities and installations for compliance with Specifications and Standards. • Review I/O lists, all IICATS/SCADA drawings to ensure compatibility with standards, specifications and standard software devices... • Carryout site audit and commissioning activities. • Assist in preparing and maintaining detailed plan for management of the project. • Prepare and utilise project reporting processes to meet the business requirements of OT • Ensure all team tasks are performed in accordance with the QMS. • Ensure that work practices are consistent with Sydney Water's Environmental Plan. • Ensure clients receive comprehensive advice. • Participate in the business planning process of OT. • Provide input to team meetings, project meetings, HAZOP, CHAIR and CHAZOP workshops as required. • Work to legislative requirements, plans and policies. • Provide cost estimation for SCADA/IICATS part of the Project. Follow up for the approval. • Initiate Project cost recovery process and liaise with SWC finance for necessary paperwork • Provision of technical advice and support in the delivery of the SCADA capital works projects including commissioning • Provide Technical Advice for SCADA System processes (to Networks)
----------------------------	---

Education / Qualifications

Required	Recognised four (4) year degree or equivalent qualification in areas such as (but not limited to) Electrical, Electronics, Mechatronics or Control Engineering
Desired	

Certifications / Licences

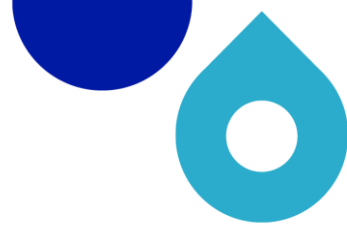
Required	- This position has been designated as a Critical Worker role under the Security of Critical Infrastructure Act 2018 (SOCIA Act). As such, the successful candidate must hold a current AusCheck background check clearance prior to appointment. - Drivers licence
Desired	

Experience

Required	- Minimum of 4 years of demonstrated experience in the review, functional testing & commissioning of control software and SCADA Configuration for water, recycled and wastewater systems. - Proven ability in design, development, review and problem solving of software & hardware for SCADA and Telemetry systems using industry standard programming languages, HMI configuration, general software development and interface tools. - Proven ability in design, operation and maintenance of process control SCADA or telemetry systems. - Working knowledge of operation water and wastewater systems relating to treatment plants. - Working knowledge of telemetry communication network (LAN and WAN) and protocols. - Working Knowledge of effective quality control and audit trail in both engineering and system administrative functions. - Proven ability to interpret customer requirements from Functional Design Specifications and to incorporate these into P & ID diagrams as input to the SCADA/I&C/ Electrical Control & Monitoring design development process. - Demonstrated experience in the implementation of new technology to improve water and wastewater asset performance. - Demonstrated ability and experience in translating complex client requirements into technical SCADA engineering solutions, developing initial option and concept reports and providing technical/commercial information for business cases. - Thorough knowledge and proven experience of SCADA, telemetry control systems and their application in water and wastewater assets relating to Sydney Water's provision of total service to customers - Thorough knowledge and proven experience in project planning and management.
-----------------	---



	• Thorough knowledge and proven experience in commissioning of telemetry/SCADA systems. • Demonstrated ability to plan and organise work to meet time, cost and quality requirements. • Demonstrated ability to maintain effective relationships between the Project Team, Customers, Product Delivery Partners and Service Providers. • Demonstrated ability to implement effective quality control and audit trail in both engineering and system administrative functions. • Demonstrated success in working in team/s to achieve business outcomes. • Well developed communication skills, both written and oral and the ability to liaise with Sydney Water Corporation's personnel at all levels • There may be physical requirements of the role that may not be suitable for all candidates.
Desired	•



Capabilities and Skills

The capability and skill requirements for this role are identified in the skills profile listed below. This is comprised of Enterprise Capabilities, that are essential for all roles and functional skills, which are specific to each role.

Enterprise Capabilities (C-E)			
Capability	Descriptor		
Accountability	Ensures that own actions and those of others are focused on achieving goals and owning the outcome, in a safe, inclusive collaborative way.		
Agility	Adapts readily to change and encourages alternative views by using a range of interpersonal communication skills. Develops and coach's others while being aware of impact on others.		
Innovation	Develops innovative outcomes to solve problems in ways that are not immediately evident and encourages new ideas and thinking in others.		
Functional Skills			
Skill	Priority	Essential or Desirable	Proficiency level
Project Coordination	1	Essential	Advanced
Troubleshooting (Problem Solving)	2	Essential	Advanced
Engineering Design Process	3	Essential	Advanced
Stakeholder Management	4	Essential	Intermediate
Project Risk Management	5	Essential	Intermediate
Business Writing	6	Essential	Intermediate
Interpersonal Communications	7	Essential	Intermediate
Influencing Skills	8	Essential	Intermediate
Control Systems	9	Essential	Intermediate
System Configuration	10	Desirable	Intermediate
Proficiency Level Descriptors			
Developing - Building practical experience, needs continued coaching.			
Intermediate - Independent execution, minimal guidance.			
Advanced - Fully independent execution, coaches' others.			
Mastery - Strategic, sought as expert internally and externally.			

Additional notes

Sydney Water takes the safe provision of its services to the public and the protection of its information assets extremely seriously. As a Sydney Water employee, you are required to understand your obligations under the [Acceptable Use of Information Technology Policy](#) and how Sydney Water's Information Technology is to be used. You must also help keep your workplace secure by ensuring you do not enable non-authorised people access to sites, maintain the integrity of locked entries and exits, and where appropriate, alarms being engaged.

Sydney Water requires all users to embrace and adhere to all enterprise and protective security policies, awareness programs and frameworks for Sydney Water assets.