

POSITION DESCRIPTION

Safety Reliability Analyst / Adviser **Position Title: Engineering and Capital Programs Cluster / Business Unit / Division**

Systems Safety & Reliability **Section or Unit:** Band 5/6 - Linked Role Classification:

PD-1809 **Position Description Number:**

Professional **Work Contract Type:**

POSITION PURPOSE

The Safety & Reliability Analyst /Adviser provides engineering and safety analysis support and expertise by applying and extending current risk and reliability techniques. This position takes plays a key role in the delivery of services undertaken by the section, including the application and development of risk and reliability engineering techniques and the provision of sound technical advice in systems, plant and process safety, regulatory compliance and independent review of safety assessments to support ANSTO's strategic direction.

ORGANISATIONAL ENVIRONMENT

ANSTO is the national organisation for nuclear science and technology. We focus on undertaking leading edge research, delivering innovative scientific services and providing specialised advice to government, industry, academia and other research organisations.

Engineering & Capital Programs (E&CP) provides comprehensive project management, engineering, technical and safety and reliability services and support for the organisation. E&CP is comprised of the Engineering Delivery Office, Engineering Technical Services Group, System Safety and Reliability and Engineering Special & External Projects Group.

The Systems Safety & Reliability section undertakes reliability, availability and maintainability assessments of plant; safety and design reviews of plant, systems and processes; and root cause analyses of events and incidents. The section also advises and assists clients on compliance with the ANSTO OHSE Management System and on regulatory compliance aspects in relation to safety.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities

The key accountabilities for the Band 5 position include:

- Independently conduct safety assessments and audits of facilities, processes, plant, equipment, systems and experiments utilising technical and analytical skills and expertise in applied hazard and risk assessment.
- Lead small to medium cross-functional safety and reliability services projects or projects of a complex or novel nature under supervision of a senior professional.
- Assist with the development and implementation of ANSTO's Safety Management System to ensure quality standards are established and maintained and to communicate changing Licensing and Regulation requirements.
- Identify and develop technical solutions to safety and reliability situations.
- Evaluate and respond to submissions to the Safety Assessment Committee (SAC), as required.
- Provide support and advice in the preparation and maintenance of Safety Analysis Reports for the operation of ANSTO's facilities.

- Establish quality working relationships and ongoing communication with clients to ensure end products meet client needs and conforms to regulatory and standards requirements.
- Develop internal and external networks to identify opportunities for commercial projects, professional development, collaboration and/or sharing of information.
- Assist with the development and training of less experienced analysts including coaching and mentoring.
- Maintain up-to-date knowledge of developments and best practice for system and safety analysis techniques and implement improvements as identified.
- Proactively seek both formal and on-the-job training, development and mentoring opportunities.
- Undertake additional duties as required and during periods of leave of other staff.

In addition to performing all Band 5 key accountabilities, the key accountabilities for a Band 6 position include:

- Utilise knowledge and technical expertise to provide systems safety analysis and advice on proposed changes to systems within ANSTO and proposed solutions to engineering systems;
- Develop and review safety documentation that meets the needs of the client and external regulatory authorities (ARPANSA, Comcare) and for submission to the Safety Assessment Committee;
- Contribute to the development and maintenance of ANSTO's safety management by developing operational procedures relating to safety systems;
- Communicate effectively with customers and other stakeholders ensuring clarity, accuracy of information and confidentiality requirement whilst ensuring a high level of customer satisfaction;
- Undertake research and investigations and assist in procedure development to contribute to the improvement of ANSTO safety management processes and safety culture;
- Validate safety documentation to meet audit processes;
- Contribute to the development and application of policies and principles for effective and efficient operation of the team and in the wider ANSTO context;
- Assist more senior team members in planning, organising, monitoring progress and providing technical guidance and advice;
- Network with other relevant professional groups, both within ANSTO and outside, to maintain good working relationships and to promote business, collaborative and/or stakeholder interests and prospects;
- Utilise technical skills to consider and evaluate situations and recommend options whilst ensuring that activities in relation to licensing and regulation and safety and reliability services are met;
- Advise on the preparation and maintenance of safety cases for the operation of ANSTO's Nuclear Installations and other controlled facilities;
- Lead, conduct, and review safety analyses using a range of internationally accepted techniques in hazard, reliability and risk analysis;
- Advise on conformance to regulations, standards and codes set by external authorities, reviews and quality audits;

Decision Making

- The position works within a framework of legislation, policies, professional standards and resource parameters. Within this framework the position has some independence in determining how to achieve the objectives of the function including deciding on methods and approaches, operations, project planning and allocation of resources
- The position is fully accountable for the accuracy, integrity and quality of the content of advice provided to key stakeholders and is required to ensure that decisions are based on sound evidence.

The levels of authority delegated to this position are those approved and issued by the Chief Executive
Officer. All delegations will be in line with the ANSTO Delegation Manual AS-1682 (as amended or
replaced)

Key Challenges

- Meet customer requirements and expectations particularly where there may be limitations due to regulatory and standards requirements.
- Develop technically competent and workable recommendations taking into account a diverse range of knowledge and experience.
- Ability to quickly appreciate the technical complexities of specific ANSTO or external facilities, processes and activities and assess the safety implications of proposed changes to these and to develop options for improvement;
- Ability to advise promptly when safety or licensing aspects are considered inadequate, whilst understanding the cost and other implications of the advice;
- Understand regulatory environment and the specific regulatory requirements and to develop and utilise relationships with regulator(s) effectively.

KEY RELATIONSHIPS

Who	Purpose
Internal	
Manager, Systems Safety & Reliability	 Receive guidance and direction Provide expert, authoritative and evidence based advice Recommend and gain endorsement for plans and goals and other initiatives
Work area team members	 Provide expert advice and analysis on a full range of matters Contribute to group decision making processes, planning and goals Collaborate and share accountability
Internal customers	Maintain collaborative relationshipsProvide engineering & safety analysis support
External	
External commercial customers include organisations in chemical, petrochemical and other engineering firms.	 Provide engineering & safety analysis support Provide safety and licensing advice and support services.

POSITION DIMENSIONS

Staff Data	
Reporting Line	Manager, Systems Safety & Reliability
Direct Reports	Nil

Special / Physical Red	quirements
Location:	Based at Lucas Heights
	Working in different areas of designated sites/campuses as needed
Travel:	May be required to travel to ANSTO sites from time to time
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer) Public speaking

	When inspecting plant and equipment may be required for short periods to undertake:
	 Frequent movements (climbing, stooping, kneeling, crouching, crawling)
	 Working in a loud environment
	 Wearing personal protective equipment
Radiation areas:	May be required to work in radiation areas under tightly regulated conditions
	Perform duties in an area where radioactive materials are handled under tightly controlled safety conditions
	Perform duties with and in an area where hazardous chemicals or materials are handled under tightly controlled safety conditions
Linked Role Transition:	The transition from Band 5 to Band 6 will occur following a
	recommendation from the relevant supervisor, assessment by the
	Manager, SSR (in conjunction with the Safety and Reliability Advisers)
	and approval from the Group Executive Capital Programs & Chief
	Engineer. Transition is not automatic and ability to perform Band 6
	accountabilities will need to be demonstrated and assessed.
Hours:	Willingness to work extended and varied hours based on operational requirements
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements
	Obtain and maintain appropriate federal government clearance

Workplace Health & Safety	
Specific role/s as specified in	All Workers
AG-2362 of the ANSTO WHS	Other specialised roles identified within the guideline a position
Management System	holder may be allocated to in the course of their duties

ORGANISATIONAL CHART

On file

KNOWLEDGE, SKILLS AND EXPERIENCE

The knowledge, skills and experience requirements for a Band 5 position:

- 1. Degree in Engineering or Science or other relevant discipline.
- 2. Strong academic aptitude for analysis of engineering systems and the application of scientific and engineering principles.
- 3. Computing skills including both office and engineering software.
- 4. Excellent written and verbal communication skills.
- 5. Ability to effectively work independently and as part of a team.
- 6. Strong customer service focus.
- 7. Demonstrated experience in successful customer management.
- 8. Hazard and Operability Studies (HAZOP) and/or failure mode and effects analysis (FMEA) or equivalent certification at the participant level.

In addition to the knowledge, skills and experience requirements for the Band 5 level, the Band 6 position also requires:

- 9. Hazard and Operability Studies (HAZOP) and/or failure mode and effects analysis (FMEA) or equivalent certification at the Leader level.
- 10. Experience in conducting safety assessments, investigations and audits.
- 11. Knowledge and experience in the application of relevant regulatory and standards requirements.
- 12. Demonstrated ability to independently lead projects and utilise project management methodologies to deliver quality outcomes.
- 13. Considerable experience in hazard and risk assessment and safety management systems.
- 14. Demonstrated ability to develop safety documentation and policy.
- 15. Strong computing skills including Microsoft Office and Engineering related software systems.
- 16. Excellent written and verbal communication skills.
- 17. Experience in the use of SAP (desirable).
- 18. Specialist knowledge of systems safety and reliability engineering and working knowledge of nuclear, radiological and industrial safety.

VERIFICATION

This section verifies that the line manager and appropriate senior manager/executive confirm that this is a true and accurate reflection of the position

Line Manager		Delegated Authority	
Name:	Simon Bastin	Name:	Gerard Breen
Title:	Manager, Systems Safety & Reliability	Title:	Acting Group Executive Capital Programs & Chief Engineer
Signature:	On File	Signature:	On File
Date:		Date:	

Requirements for Transition from Band 5 to Band 6:

E	ngineering & Capital Programs			
Safety F	Reliability Analyst Advisor – PD-XXXX			
Band 5 to Band 6 Transition Checklist				
Name:				
Commencement Date:				
Assessment Date:				
Requirements for transition		Met Criteria		
 Considerable experience in management systems. 	hazard and risk assessment and safety	Yes No		
Operability Studies (HAZOP)				
 Successful completion of a p with the majority undertake 	portfolio of significant assessment projects en with minimal supervision.	Yes No		
	lead and conduct HAZOP, FME(C)A, and/or on significant processes, facilities or	Yes No		
 Demonstrated capability to little supervision. 	h Yes No			
•	ependently and responsibly perform Band 5 equired knowledge/skills/experience for a	Yes No		
 Possesses the knowledge, sl 6 level. 	kills and experience requirements for the Ban	d Yes No		
Please attach a written submission the above requirements	demonstrating and justifying how the emplo	oyee meets <u>each</u> of		
the employee meets all requirements	petence in accordance with Linked Role PD-18 s for transition and recommend transition fro ached written submission detailing how the e	m Band 5 to Band 6 b		
Manager Name & Title:				
Manager Signature:	Da	te:		
Group Executive, Capital Programs 8 I have reviewed all information and a	Chief Engineer pprove transition from Band 5 to Band 6			
Signature:	•			