



# POSITION DESCRIPTION

<b>Position Title:</b>	<b>Military Satellite Communications Scientist/Engineer</b>
<b>Position Reference Number:</b>	ECRCEWD005
<b>Division:</b>	Cyber and Electronic Warfare
<b>Position Classification:</b>	S&T3-4
<b>Position Location:</b>	Edinburgh
<b>Security Level:</b>	NV1
<b>Minimum Academic Qualification:</b>	Bachelor
<b>Enquiries:</b>	Dr. Gerald Bolding, Group Leader Protected Satellite Communications 08 73896400, gerald.bolding@dst.defence.gov.au

## Academic Disciplines

Aerospace/ Aeronautical Engineering, Naval Architecture	Chemical, Radiological, Biological, Food sciences	Materials Science
Computer Sciences, IT, Software Engineering, Telecommunications	Mathematics and physics	Psychology and Social Sciences
Mechanical and Mechatronic Engineering (including robotics)	Electronic/ Electrical Engineering	Other

## Position Overview

Join the Protected Satellite Communications Research and Development team, apply your early career developer skills in Software and/or Firmware development and build your career.

The position will evolve with you into research themes such as advanced communications signal processing for SATCOM waveforms or machine learning for SATCOM Network Defence. You will join an existing multi-disciplinary collaborative team with a record of delivery and will participate in trials and experimentation. As your experience grows, you will provide advice to the Australian Defence Force on the acquisition of future SATCOM systems and on the opportunities borne of the DST SATCOM research program. The Protected SATCOM laboratory facilities include software defined radio systems, various development environments and a modern satellite anchor station that provides access to operational Military satellites in support of our research, experimentation and trials.

## Position Duties

Duties specific to the role.

- Design and development of software and firmware for novel embedded Satellite Communications systems for the ADF
- Design and development of novel SATCOM network defence systems including the application of machine learning and anomaly detection techniques
- Participation in multi-disciplinary teams in Satellite Communications Systems including sharing knowledge and expertise with others
- Conduct of test and evaluation of Satellite Communication systems on Defence satellites using DST’s modern laboratory facilities.
- Participation in demonstrations and trials
- Provision of expert scientific and technical advice to Defence stakeholders on the performance and acquisition of Satellite Communications systems
- Communicating the broader context of the Satellite Communications program to Defence stakeholders
- Engaging in external relationships with industry, academia or allied partners, and contributing expert advice into collaborative partnerships

## Other Requirements

It is expected that the candidate will upgrade to an NV2 security clearance at some stage  
The position will involve occasional rural and interstate and travel  
The position may involve occasional overseas travel and participation in sea trials