Job Description

Job Title:	**Software Engineer**

Responsible to:	**Software Team Leader**

Department (s):	**Engineering**

JOB PURPOSE

To design, implement and test embedded software, from machine interfaces to human interfaces, across the range of ETL products.

ROLE DIMENSIONS

Working as part of the Software team, reporting to the Software Team Leader. The role will suit a recent graduate with knowledge of embedded software using the C programming language and communications. A keen interest in and knowledge of the associated hardware would be most advantageous.

Experience and knowledge are desired in:

- Multithread / real time embedded C programming / debugging
- Modern embedded software practice
- Networking experience in TCP/IP, UDP
- Driver interfacing to SPI, I2C, RS232/485, CAN
- Hardware and board level debug

Experience or knowledge in the following would be advantageous:

- C#, C++
- SNMP
- Node.js, bash, Python, Perl
- Linux
- Yocto / Buildroot
- Jenkins
- JavaScript, HTML
- Automated test
- Microchip PIC18/32
- Cyber security of embedded systems

KEY RESPONSIBILITIES AND ACCOUNTABILITIES

Design, development and test of embedded software.

Taking part in reviews, contributing or suggesting optimisations or structure strategies as required.

Contribute to system architecture design as necessary.

Technical documentation and reports.

COMPETENCIES REQUIRED FOR THE ROLE

Qualifications and Experience	Essential (E) or Desirable (D)	HR Office Use Only
Degree in Engineering related subject with a 2.2 (or higher), or commensurate experience	E	
Experience in a similar role	D	
Able to read/derive application requirements from Electronic schematics	D	
Skills		
Embedded C	E	
JavaScript, HTML	D	
Writing drivers for microcontrollers e.g. ADC, timers, serial communication, EEPROM,	E	
Serial/ Network Communications – TCP/IP / UDP, Socket programming	E	
Experience in writing embedded software on a variety of platforms ranging from highly resource constrained devices to multithreaded operating systems	D	
Experience in using modern electronic test equipment: Oscilloscope, Spectrum analyser, Logic Analyser and Signal Generators	D	
Software automated build and test (e.g.Jenkins)	D	
Windows C#/C++, Node.js, bash, Python, Perl	D	
Multithreaded programming/debugging	D	
Awareness of communications/satellite industry/technologies	D	
Linux	D	
Personal Qualities		
Able to work independently and as part of a team	E	
Professional business attire	E	
Professional and approachable manner	E	
Positive, confident and enthusiastic attitude at all times	E	

JOB DESCRIPTION AGREEMENT

We confirm that this conveys a full and accurate description of the job as at August 2019

Job Holder's Signature: Date:

Manager of Department Signature: Date: 17/1/22

Director of Department Signature: Date: