



Public Service of Papua New Guinea

JOB DESCRIPTION

		POS. NO.: NISITMET-069
DEPARTMENT: TRADE, COMMERCE AND INDUSTRY	DESIGNATION/CLASSIFICATION: ELECTRICAL METROLOGIST – GRADE 9	
OFFICE/AGENCY: NATIONAL INSTITUTE OF STANDARDS & INDUSTRIAL TECHNOLOGY	LOCAL DESIGNATION: ELECTRICAL METROLOGIST	
DIVISION: METROLOGY	HIGHEST SUBORDINATE:	POS. NO.:
BRANCH: LEGAL METROLOGY	IMMEDIATE SUPERVISOR: SENIOR LEGAL METROLOGIST	POS. NO.: NISITMET-063
SECTION: SAFETY & ENVIRONMENT	LOCATION: BOROKO, NCD	

HISTORY OF POSITION

DPM FILE NO:	DATE OF VARIATION	DETAILS
	01.03.2017	Reno/Redes/Reclass/Revise duties.

1. PURPOSE & FUNCTIONAL OBJECTIVE OF THE POSITION

The Electrical Metrologist (Legal Metrology) is responsible for the following:

- Ensure the verification and legal compliance of electrical measuring instruments used in trade, utilities, health, environment, and safety sectors.
- Support NISIT's mission to uphold measurement integrity, promote fair commerce, and align with international metrology standards.

2. ACCOUNTABILITIES

The Electrical Metrologist (Legal Metrology) shall report to the Senior Legal Metrologist – *Safety & Environment*, on all matter regarding the Section's functions and objective and occupational duties as follows:

- Perform field and laboratory verification of electrical meters, voltage testers, and related equipment
- Maintain calibration traceability and safeguard reference electrical standards
- Provide documentation to support enforcement and regulatory actions
- Conduct stakeholder engagement to raise awareness of legal metrology requirements

3. MAJOR DUTIES (JOB FUNCTIONS)

3.1 Key Roles:

The roles of the Electrical Metrologist (Legal Metrology) include but are not limited to:

- **Technical Verifier:** Conduct inspections and performance assessments of electrical instruments and systems.
- **Compliance Officer:** Apply verification procedures and legal tolerances based on OIML R46, IEC 62052/62053, and PNG standards.
- **Legal Units Enforcer:** Ensure all electrical measurements conform to PNG's legally recognized units of measurement.
- **Stakeholder Liaison:** Offer technical guidance and engage with utility providers, manufacturers, inspectors, and regulators.
- **Records Custodian:** Manage verification certificates, reports, and audit-ready documentation.

3.2 Key Responsibilities:

The responsibilities of the Electrical Metrologist (Legal Metrology) include but are not limited to:

- Verify instruments such as electricity meters, voltage testers, and power analyzers used in trade and utility billing.
- Assess instruments for conformity to approved types or patterns and report any non-compliances.
- Operate and calibrate electrical reference standards, test benches, and verification kits with precision.
- Maintain comprehensive records of verification results, including inspection logs and compliance certificates.
- Support outreach programs and facilitate technical briefings on electrical compliance protocols.
- Ensure impartiality, confidentiality, and occupational safety during all verification processes.

4. POSITION AND PERSON SPECIFICATIONS:

4.1 Qualifications

- Bachelor's degree in Electrical Engineering, Physics, Applied Sciences, or a related discipline.
- Sound understanding of electrical measurement principles and instrumentation.
- Knowledge of PNG Legislations relating to Metrology and international standards such as OIML R46 and IEC 62052/62053.

4.2 Knowledge & Skills

- Sound understanding of measurement and instrumentation.
- Good written and oral communication skills.
- Computer literate.

4.3 **Work Experience**

- Minimum one year of experience in metrology, electrical calibration, or verification inspections would be desirable but not necessary.
- Demonstrated ability to conduct stakeholder engagement and provide technical support.
- Background in documentation, compliance reporting, and legal metrology enforcement.

4.4 **Personal Characteristics/Attributes**

The Officer should demonstrate competence in some or all of the following:

- **Adaptability:** Demonstrate a willingness to be flexible, versatile and/or tolerant in a changing work environment while maintaining effectiveness and efficiency.
- **Behave Ethically:** Understand ethical behavior and business practices, and ensure that own behavior and the behavior of others is consistent with these standards and aligns with the values of the division and organization.
- **Build Relationships:** Establish and maintain positive working relationships with others, both internally and externally, to achieve the goals of the division and organization.
- **Communicate Effectively:** Speak, listen and write in a clear, thorough and timely manner using appropriate and effective communication tools and techniques.
- **Creativity/Innovation:** Develop new and unique ways to improve operations of the division and to create new opportunities.
- **Focus on Client Needs:** Anticipate, understand, and respond to the needs of internal and external clients to meet or exceed their expectations within the divisional and organizational parameters.
- **Foster Teamwork:** Work cooperatively and effectively with others to set goals, resolve problems, and make decisions that enhance divisional or organizational effectiveness.
- **Lead:** Positively influence others to achieve results that are in the best interest of the division.
- **Make Decisions:** Assess situations to determine the importance, urgency and risks, and make clear decisions which are timely and in the best interests of the division.
- **Organize:** Set priorities, develop a work schedule, monitor progress towards goals, and track details, data, information and activities
- **Plan:** Determine strategies to move the division forward, set goals, create and implement actions plans, and evaluate the process and results.
- **Solve Problems:** Assess problem situations to identify causes, gather and process relevant information, generate possible solutions, and make recommendations and/or resolve the problem.
- **Think Strategically:** Assesses options and actions based on trends and conditions in the environment, and the vision and values of the division.

5. **WORKING CONDITIONS:**

- Frequent field visits to utility sites, industrial facilities, commercial premises, and remote areas.
- Use of precision electrical standards, verification kits, and diagnostic instruments.
- Full-time work schedule with flexibility for field operations and stakeholder meetings.
- Mandatory use of PPE and adherence to NISIT safety protocols.
- Exposure to outdoor, industrial, and occasionally hazardous environments during verification tasks.
- Officer may be required to work evenings, weekends, or public holidays to support field campaigns, trade operations, or regulatory requirements.