

Protected Area Technician Job Description

As a **Protected Area Technician (PAT)**, you will be responsible for supporting technologies across one or several protected areas. You will provide technical support services to ensure critical digital infrastructure and conservation tools are implemented and maintained, for long-term success. Your expertise will ensure the reliable operation of data analytics and management tools, power systems, communications networks, surveillance, and IoT devices that support conservation, security, and research efforts. This role demands a hands-on problem-solver who thrives in isolation, can troubleshoot with limited resources, and is comfortable working in rugged conditions.

Primary responsibilities:

- Installation, Maintenance, Monitoring, Management and Troubleshooting of:
 - Network infrastructure
 - Internet Access and Backbone (repeaters, servers, switches, LAN, VPN, WAP, Wi-Fi)
 - Radio Communications (repeaters, base stations, handheld programming)
 - IoT, Low Power Wide Area Networks (LoRaWAN/Sigfox sensor management, gateways, servers)
 - Field GPS and emergency satellite communication systems
 - Oversee Security Systems (Digital Firewalls, CCTV, license plate recognition)
 - Power Systems
 - Grid (UPS)
 - Off-grid renewables (Solar)
 - Digital Security and Cloud Systems (firewall)
 - Data collection systems (rugged phones, trackers camera traps)
- Sensor integration with domain awareness software
- GIS Data and Systems Management (ArcGIS, EarthRanger, SMART, etc.) - know how to support primary user of software

Additional responsibilities:

- Monitor and report on ICT Performance (downtime, outages, system health)
- Manage hardware inventory and procurement (computers, IoT devices radios, stock take, spares)
- Provide end-user IT admin, support and software deployment (Updates, antivirus, GIS tools)
- Conferencing Communications and Videography Systems
- Writing installation and maintenance reports, cyber security analysis and pre-deployment assessments
- Assisting with technology selection, installations design and evaluation for procurement

Essential Skills and Qualifications:

- Relevant qualification in computer system administration
- Experience in power, networking and remote communications
- Familiarity with report writing and critical thinking analysis
- Adaptable to isolation, capable of working independently and coordinating with remote teams
- Physically fit able to work at heights, lift heavy equipment and endure harsh conditions
- 4x4 driving proficiency and remote camp setup experience
- Basic First Aid and risk mitigation for hazardous environments (remote, heights, dangerous animals)
- Self-sufficient problem-solving who is comfortable with trial-and-error learning.
- Project and third-party management for repairs and external support (second/third line)
- Good time management and resourceful under constraints, improvising with limited tools

Who you will work with:

- Ops Room and Conservation Managers, Data Analyst, Regional ICT Manager, Systems Consultants/third party vendors