IMPERIAL COUNTY OFFICE OF EDUCATION

CLASS TITLE: NETWORK OPERATIONS MANAGER

BASIC FUNCTION:

Under the direction of an assigned administrator, plan, organize and direct technical support and help desk functions related to telecommunication infrastructure and network systems; coordinate communications, projects, security functions, personnel, maintenance, repairs and information to meet technical support needs; supervise and evaluate the performance of assigned personnel.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

Plan, organize, control and direct technical support and help desk functions related to computer, telecommunication, network systems and other technology infrastructure for the Imperial Valley Telecommunications Authority (IVTA), County Office and local school districts; establish and maintain related timelines and priorities; monitor, evaluate and adjust activities in response to technology needs; assure proper and timely resolution of computer and network issues and malfunctions.

Monitor and maintain network utilization, performance and security.

Provide technical assistance and user support to personnel, school districts, outside agencies and others.

Respond to inquiries and provide detailed and technical information concerning design, equipment, hardware, software, routing, security, connectivity, configuration, malfunctions, applications, practices, techniques and procedures of appropriate network equipment.

Participate in the planning, design, upgrade, installation, configuration and modification of equipment; assist in development of network design including physical and logical layout; evaluate settings to assure optimal utilization of network resources; research, recommend and implement modifications to enhance operations and connectivity.

Plan, organize and support network security measures to protect the County Office data assets; minimize risk for data breaches; provide training opportunities for staff and end-user.

Develop and prepare the annual preliminary budget for County Office network systems and functions; analyze and review budgetary and financial data; control and authorize expenditures in accordance with established limitations.

Participate in the planning, development and implementation of projects (to include construction projects); estimate time, materials and supply needs to complete assigned projects.

Assist with the development and implementation of network utilization policies.

Supervise and evaluate the performance of assigned personnel; interview and select employees and recommend transfers, reassignment, termination, and disciplinary actions; coordinate subordinate work assignments and review work to assure compliance with established standards, requirements and procedures.

Develop and maintain visual representations of the network architecture and design.

Research, evaluate, implement and provide recommendations concerning the purchase of new hardware and software; confer with vendors concerning product and pricing information; test software and applications to determine operational effectiveness and adaptability with systems.

Monitor systems, equipment, components and devices as assigned; inspect, troubleshoot, diagnose and resolve system problems and malfunctions.

Prepare and maintain various records and reports related to work orders, inventory, calendars, mileage, equipment, projects and assigned activities.

Communicate with personnel and various outside agencies to exchange information and resolve issues or concerns.

Attend and participate in various meetings, in-services and seminars as assigned.

Manage, monitor and maintain support models for helpdesk services, which include both distributed and helpdesk support models.

Serve as the escalation point for major computer or network problems.

Work with technical and non-technical parties throughout the state to effectively communicate the issues relevant to the effective delivery of services.

Manage and maintain the collection of statewide data needed by the program.

Assist in the establishment of Service Level Agreements (SLAs). Monitor and evaluate performance based on approved SLAs.

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Management of the operations and activities involved in providing helpdesk support to schools. Principles, theories and techniques of network design.

Wired and Wireless networking equipment including routers, firewalls, controllers, access points, antennas and switches.

Server operating systems and back office applications.

Modern IP telephony communication systems.

LAN and WAN usage, implementation and network terminology.

Principles, practices, procedures, materials, methods and tools used in the installation,

maintenance, and monitoring of LAN/WAN equipment.

Network communication protocols and topologies to include but not limited to: TCP/IP,

Ethernet, routing protocols (EIGRP, RIP, OSPF, BGP) and others.

Network management protocols such as Simple Network Management Protocol (SNMP) Internet Control Message Protocol (ICMP) and Netflow.

General principals and understanding of radio frequency (RF) and its application on wireless networks.

Firewalls, intrusion detection systems and network analyzers.

Cybersecurity principles, policies and best practices.

Back office systems such as Domain Name Services (DNS), Authentication-Authorization-

Accounting (AAA), Dynamic Host Configuration Protocol (DHCP)

Network Open Systems Interconnect (OSI) model.

IP networks related to implementation, to include SIP, H.323 and H.320 networks.

Document through the use of Geographic Information Systems such as ArcGIS and Google maps.

Oral and written communication skills.

Interpersonal skills using tact, patience and courtesy.

ABILITY TO:

Plan, organize, direct, and coordinate the work of management, supervisory, professional and technical personnel.

Direct the investigation, troubleshooting, diagnosis and repair of network system malfunctions. Inspect projects for accuracy, completeness and compliance with established requirements.

Supervise and evaluate the performance of assigned personnel.

Install, configure and manage server operating systems and network services (DHCP, DNS, proxy, etc.).

Configure and manage modern phone communication systems.

Implement and manage Quality of Service (QoS) and multicast for voice and video over a network.

Configure, implement and manage hardware and software. Recommend and assist with configuration changes to routers, firewalls and switches. Manage and support streaming on network devices (Multicast, unicast, archive).

Configure, install, and support LAN/WAN equipment for wired and wireless environments. Coordinate and manage software updates/patches for equipment and servers.

Provide hands on and remote support/troubleshooting of integrated video and audio equipment in conference room and mobile system environments.

Work directly with customers to assist in conference setup and equipment use in a professional and courteous manner, with excellent communication and interpersonal skills.

Work with vendors and technical support organizations to coordinate troubleshooting process for all related troubles in a timely manner.

Monitor and provide utilization records. Provide direct support for technical services. Manage

trouble tickets and reporting.

Assist users in access and utilization of statewide network resources. Assist program staff with technical design, setup, and utilization.

Analyze situations accurately and adopt an effective course of action. Answer and respond to support requests from districts.

Communicate effectively both orally and in writing.

Establish and maintain cooperative and effective working relationships with others. Operate a computer and assigned office equipment.

Meet schedules and time lines.

Work independently with little direction.

Prepare comprehensive narrative and statistical reports.

Direct the maintenance of a variety of reports, records and files related to assigned activities.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: bachelor's degree in computer science or related field and five years of increasingly responsible experience in the installation, maintenance, and repair of network hardware, software and demonstrated experience managing complex projects and/or technical staff positions.

Supervisory experience desired.

LICENSES AND OTHER REQUIREMENTS:

Valid California driver's license.

WORKING CONDITIONS:

ENVIRONMENT: Indoor work environment. Driving a vehicle to conduct work.

PHYSICAL DEMANDS: Dexterity of hands and fingers to operate a computer keyboard. Hearing and speaking to exchange information. Seeing to view a computer monitor read a variety of materials and. Sitting or standing for extended periods of time. Lifting, carrying, pushing or pulling moderately heavy objects as assigned by the position. Bending at the waist, kneeling or crouching.