

STATE OF SOUTH DAKOTA CLASS SPECIFICATION

Class Title: Communications Network Specialist

Class Code: 40371
Pay Grade: GI

A. Purpose:

Maintains and participates in the planning and design of voice, data, and video communications systems and associated services and provides technical support to a communications network to ensure efficient operations.

B. Distinguishing Feature:

The Communications Network Specialist provides technical support for a communications network; assists in network planning and design; maintains the ongoing operations of the communications network; and assists in the installation of new or enhanced communications software, particularly upgrades. Incumbents in this classification do not provide client support by maintaining an agency's computer environment. Incumbents resolve the majority of routine change orders or operating problems in all areas of the communications system and may provide technical support to other network administrators.

The Communications Network Technician provides day to day support for the operation and technical maintenance of a telecommunications network and system, seeking assistance from more senior technical staff, vendors, or outside consultants for unusual or complex problems.

The Communications Network Analyst designs and manages the comprehensive operations of a statewide telecommunications network and system including technical aspects, network services planning and engineering, software maintenance, and contract administration.

C. Functions:

(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions which may be found in positions of this class.)

1. Monitors and maintains communications systems activities to provide on-going operations.
 - a. Identifies potential system failures and operating problems.
 - b. Initiates repair or replacement of failed components.
 - c. Submits work orders to outside contractors or vendors and follows up on services to ensure work is performed on schedule and per specifications.
 - d. Develops and maintains communications system software.
 - e. Installs and reconfigures system to optimize network performance.
 - f. Recovers files, file systems, or databases that may be lost due to hardware/software failures, power outages, or client errors.
2. Provides technical communications system support to agency/management.
 - a. Participates in planning and problem determination and resolution.
 - b. Prepares requisitions for the procurement of hardware and software.
 - c. Researches hardware and software markets and pricing for services and equipment.
 - d. Evaluates and tests new and existing products/systems for function, feature, and compatibility, and documents findings.
 - e. Plans and maintains utilization and communications to other systems.
3. Plans, designs, schedules and coordinates local and remote site preparation for equipment installation.

- a. Prepares detailed plans and specifications for implementation of new or enhanced networks and systems.
 - b. Participates in site reviews and procures necessary equipment.
 - c. Schedules client training.
 - d. Conducts follow up reviews to ensure work performed is in compliance with schedules and/or specifications.
 - e. Creates requests for proposals (RFP's) for new services and equipment.
4. Serves as a consultant and/or troubleshooter to clients in addressing their operational and technical needs.
 - a. Answers questions regarding communications problems or network capabilities.
 - b. Trains clients in the proper use and operation of new or upgraded products.
 - c. Consults with clients to determine system needs and interests.
 - d. Provides technical support to other agency network administrators.
 5. Performs other work as assigned.

D. Reporting Relationships:

May supervise clerical support staff or Communications Network Technicians.

E. Challenges:

To analyze potential problems of connectivity and compatibility of the many different types of current and future hardware and software systems attached to communications networks and systems. This involves staying current on a wide variety of services in voice, data, and video technologies. Also challenging is resolving problems to meet the needs of a wide range of clients while maintaining an organized network environment.

Typical problems resolved include recommending alternative communications plans that meet client needs but do not conflict with other internal systems; coordinating service orders and installations with outside vendors, contractors, and clients; and explaining communications systems to clients.

F. Decision-making Authority:

Decisions made include what maintenance changes to make to the network and what software is needed; and recommendations for policies and procedures for network system users.

Decisions referred include major upgrades or changes to the communications network or system that would affect day to day operations; network equipment purchases; and final approval of policies and procedures.

G. Contact with Others:

Daily contact with clients, vendors, and management to address system problems, provide technical advice, obtain information, or coordinate services.

H. Working Conditions:

A typical office environment. Installations and repairs may require working in cramped or confined spaces, lifting heavy equipment, or exposure to electrical hazards.

I. Knowledge, Skills, and Abilities:

Knowledge of:

- voice, data, and video systems administration;
- mathematical and scientific principles of network operations; and
- procedural aspects of network operations.

Ability to:

- plan and coordinate services;
- provide direction to technical staff and vendors;
- independently resolve network and/or clients' problems; and
- communicate effectively.