

Iowa Department of Administrative Services – Human Resources Enterprise  
Job Classification Description

## Telecommunications Specialist

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### Definition

This job classification is used only by the Iowa Communications Network.

Under general supervision, performs technical work in the design, programming, implementation, operation, and performance of Iowa Communications Network (ICN) systems and services. Work includes maintaining network hardware and software, firewalls, and security components, assisting in technical project activities, and resolving operational issues to ensure reliable service delivery; performs related work as required.

*The work examples and competencies listed below are for illustrative purposes only and not intended to be the primary basis for position classification decisions.*

### Work Examples

Consults with employees of state agencies and vendors to determine agency needs, requirements, and limitations regarding telecommunications equipment.

Provides maintenance, provisioning and management functions associated with an ICN product; works with customers and staff to share information and assistance.

Monitors network performance; provides reports on problem areas both with ICN systems and private companies connected to ICN; creates and analyzes network reports to identify network trends and initiate corrective action.

Performs project planning and implementation relating to customer service requests; maintains accurate and current network documentation and configurations, including tracking hardware and software revisions; informs management on status of projects and any network issues.

Makes presentations to demonstrate capabilities of ICN products and services; makes detailed cost estimates based on customer requirements; acts as primary project manager, initiating the request for services and interfacing with the ICN service order center, engineers and the customer; mediates and resolves differences.

Assists in the review and assessment of user needs and the evaluation and selection of equipment and services; provides technical support for other agencies and ICN divisions.

Plans and specifies requirements for future network management products and systems, including current equipment and service upgrades.

Performs engineering for design support for users, connectivity from other states and the federal government, and other ICN networking applications; oversees the ICN maintenance contractor in resolving problems in service delivery; works with the ICN transition design team for the overall upgrade of the ICN.

Analyzes proposals received from vendors offering new transmission services makes recommendation for acceptance or non-acceptance of such proposals.

## Competencies Required

### Knowledge:

- Customer Service – Principles and processes for providing customer services, including customer needs assessment, meeting quality standards for services, and evaluating customer satisfaction.
- English Language – The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Telecommunications – Transmission, broadcasting, switching, control, and operation of telecommunications systems.
- Mathematics – Arithmetic, algebra, geometry, calculus, statistics, and their applications.
- Design – Design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
- Computers and Electronics – Circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
- Technology – Practical application of technology, including applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
- Engineering and Technology – Practical application of engineering science and technology including applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

### Abilities:

- Law and Government – Understand and adhere to applicable laws, legal codes, administrative rules, and regulations.
- Oral Comprehension – Listen to and understand information and ideas presented through spoken words and sentences.
- Oral Expression – Communicate information and ideas in speaking so others will understand.
- Clerical – Maintain complex clerical records.
- Written Expression – Communicate information and ideas in writing so others will understand.
- Deductive Reasoning – Apply general rules to specific problems to produce answers that make sense.
- Inductive Reasoning – Combine pieces of information to form general rules or conclusions.
- Information Ordering – Arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
- Problem Sensitivity – Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

### Skills:

- Active Listening – Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

- Critical Thinking – Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Reading Comprehension – Understanding written sentences and paragraphs in work related documents.
- Speaking – Talking to others to convey information effectively.
- Writing – Communicating effectively in writing as appropriate for the needs of the audience.
- Active Learning – Understanding the implications of new information for both current and future problem-solving and decision-making.
- Judgment and Decision Making – Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Service Orientation – Actively looking for ways to help people.
- Complex Problem Solving – Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
- Systems Analysis – Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.
- Systems Evaluation – Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.
- Quality Control Analysis – Conducting tests and inspections of products, services, or processes to evaluate quality or performance.
- Service Orientation – Actively looking for ways to help people.

## Minimum Qualification Requirements

Applicants must meet at least one of the following minimum requirements to qualify for positions in this job classification:

- 1) Five years of full-time work experience in telecommunications work in the design, implementation, operation, or security of telecommunications or network infrastructure systems.
- 2) A total of five years of education and/or full-time experience (as described in number one), where thirty semester hours of accredited college or university coursework in digital telephony, video networking or in an area related to digital communications/networking equals one year of full-time experience.
- 3) Graduation from an accredited four-year college or university with a degree in telecommunications, network engineering, information technology, computer science, electrical engineering, or a closely related field, and experience equal to one year of full-time work as described in number one.
- 4) Current, continuous experience in the state executive branch that includes one year of full-time work as a Technical Service Specialist Senior.

*Effective date: 12/25 KC*