

POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE Associate Telecommunications Engineer	OFFICE/BRANCH/SECTION 56/Maintenance/Radio Communications	
WORKING TITLE Regional TOSNET Coordinator (RTC)	POSITION NUMBER 913-640-3640-	EFFECTIVE DATE

As a valued member of the Caltrans team, you make it possible for the Department to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. Caltrans is a performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork.

GENERAL STATEMENT:

Under the direction of a Senior Telecommunications Engineer, Southern California Projects, the incumbent is responsible for providing technical support and maintenance oversight of the Traffic Operations System Network (TOSNET) program within a region as a Regional TOSNET Coordinator (RTC). The RTC will provide technical support for the Highway Advisory Radio (HAR) systems. The incumbent will also be assisting the Office of Radio Communications (ORC) to complete its project commitments. The RTC will be located in the most appropriate District that ensures the most effective and efficient support for the TOSNET and HAR programs within a specified region. RTC ultimately reports to the Office of Radio Communications, headquartered in Sacramento. The incumbent will be stationed in Southern California. Travel is required.

TYPICAL DUTIES:

Percentage Essential (E)/Marginal (M) ¹	Job Description
25% E	Provide technical support and contractor oversight for the TOSNET and Communications maintenance contracts within a region; including the Fiber and Copper maintenance, Hub facilities, TOSNET Maintenance Repair contracts and assists in contract administration when required. Write, amend, process, add technical details, review technical requirements, and provide technical expertise during contract reviews and processing, and coordinate with District and Headquarters on all TOSNET activities.
20% E	Maintain and update the TOSNET expenditures for Fiber and Copper maintenance, Hub facilities, TOSNET Maintenance Repair contracts. Provide monthly and quarterly activity and expenditure reports to the Senior Telecommunications Engineer, Southern Projects.
15% E	Review technical requirements and functionality. Monitor contractor performance and project tasks and deadlines. Track budget expenditures, timely payments of invoices, and ensure Caltrans Ticketing system (TRAC) is utilized.
15% E	Performs quality assurance checks and engineering support in the field. Assist with the troubleshooting of communications equipment and/or circuits. Sets acceptable maintenance standards in order to ensure contractors are performing their tasks properly. Set maintenance schedules and report protocols, verify that proper engineering standards and procedures are followed.
10% E	Perform equipment inventory, purchasing and receiving procedures - Assist ORC and District personnel with inventory duties which include equipment tracking and maintaining the inventory database. Summarize, prioritize, and perform equipment purchases for Districts. Performs purchasing and receiving procedures including completing Purchase Request (PR) package, assisting with the receiving, accepting, tagging, shipping and distributing of the TOSNET related equipment.
10% E	Participate in statewide discussions to create installation, testing, and maintenance methodology, to help with the enhancement and efficiency of Intelligent Transportation Systems (ITS), as well as the maintenance of the TOSNET program.

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5% M Miscellaneous - Responds to requests for assistance and information from HQ Programs pertaining to radio communications. Act as liaison to the IT Branch assisting the ORC with matters related to IT rules, requirements and policies. Keep the ORC abreast of FCC rules, regulations, and policies.

¹ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned.
MARGINAL FUNCTIONS are the minor tasks of the position that can be assigned to others.

SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS

The position does not supervise, but maybe assigned to act as a lead person over maintenance personnel and/or provide functional direction to other engineers, and maintenance personnel.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

The incumbent must have thorough knowledge of engineering practices and principals, telecommunications systems and the California State Communications Law and the Federal Communications Commission rules and regulations. Incumbent must continually update his/her knowledge of emerging technologies, new regulations, and industry standards.

The incumbent must be knowledgeable of electronics theory, engineering mathematics, radio frequency allocations, electromagnetic wave propagation, radio field strength measurements, and traffic handling procedures.

Must be able to apply their knowledge to the design, construction, and the maintenance of radio communications system that will achieve the district's goals and objectives.

The incumbent must be familiar with the processes and procedures required to implement a large-scale radio communications systems with diverse and varying terrain and conditions.

Incumbent should have good writing skills and be familiar with the principle elements of contracts and leases.

The incumbent must have the ability to develop and maintain cooperative relations with all staff at all levels.

The incumbent must practice safe working procedures in the presence of various hazards including High Radio Frequency Emissions and EMI Electrical Energy, traffic construction, and adverse environment.

Travel in a State vehicle may be required. A valid driver's license is required. Some driving conditions may include, but are not limited to, rough, steep, narrow, rocky, sandy remote 4x4 roads.

The RTC is expected to conduct business in a professional manner.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The Regional TOSNET Coordinator (RTC) is responsible for the reliability and accuracy of all actions, decisions, and recommendations in his/her capacity. Proper use of equipment, correct methods analysis, and complying with all deadlines are the responsibility of the RTC.

The incumbent is responsible to assist, as directed by their supervisor, in providing efficient and economical telecommunications systems to support the Districts' Transportation programs. These systems are complex in design yet are required to be flexible to meet the changing needs as program emphasis changes. The incumbent assists with changes and additions in the numerous telecommunication systems and makes decisions affecting the installation or modification of equipment or systems. The incumbent must consider long-range forecasts because of the excessive lead-time required for acquisition and installation of equipment.

Inappropriate decisions or errors of judgment may lead to the loss of time and the ability to solve critical problems which will adversely affect opportunities to increase transportation efficiency and safety.

PUBLIC AND INTERNAL CONTACTS

Contacts with the district maintenance, contractors and ORC-HQ will be on a day-to-day basis. Frequent contacts will be

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made with the districts Traffic Operations. Periodic contact with private industry or other governmental agencies is also required.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

The incumbent must be physically, mentally, and emotionally able to work in various field environments including in and around traffic, in communication vaults which may be dusty and confined, at elevated levels, in and around water, climbing up and down steep slopes, carrying radio and test equipment, carrying loads of approximately 50 lbs, and working in and around all types of Caltrans vehicles. Good hearing and vision are essential in and around traffic areas. Must be able to develop and maintain a cooperative work environment through good interpersonal and communication skills.

WORK ENVIRONMENT

Approximately 60 percent of the incumbent's time will be spent in a typical office environment performing day-to-day operations. The environment consists of prolonged sitting, artificial lighting, computer work, electronic and communications equipment testing, troubleshooting, programming, configuration and assembly. Light to moderate lifting of documents, radio, electronic, communications and test equipment and supplies is required.

Approximately 40 percent of the incumbent's time will be spent in the field with district personnel, contractors, and other federal, state and county personnel performing investigations of existing and proposed State owned communications equipment and facilities. The work environment includes hazards such as traffic, working in and around high Radio Frequency (RF) fields and Electromagnetic (EMI) environments, and communication sites at various locations. The incumbent will be required to work outdoors throughout all seasons of the year under extreme temperature variations, around insects, vegetation, and rough terrain. The incumbent must be able to travel Statewide for periods up to approximately two continuous weeks, depending on job assignment.

I have read, understand and can perform the duties listed above. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

EMPLOYEE (Print)

EMPLOYEE (Signature)

DATE

I have discussed the duties with, and provided a copy of this duty statement to the employee named above.

SUPERVISOR (Print)

SUPERVISOR (Signature)

DATE
