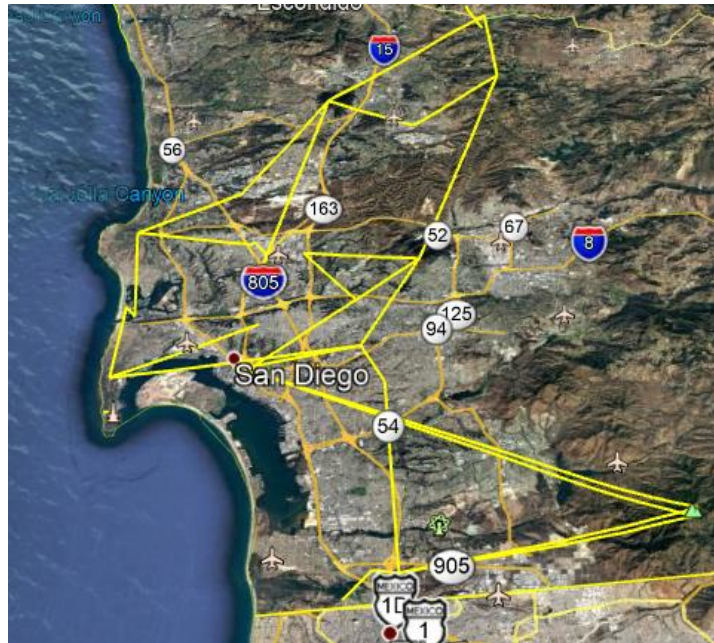




Exhibit B3-Reports "City of San Diego California"

San Diego is the eighth most populous city in the United States and second most populous in California. The city is the county seat of San Diego County, the fifth most populous county in the United States, with 3,338,330 estimated residents

The City faced a growing public safety communications challenge: an aging public safety microwave backhaul network with network equipment nearing end of life, and no easy path for scaling and incorporating new-generation technologies going forward. Nokia upgraded San Diego's critical communications infrastructure using Internet Protocol/Multiprotocol Label Switching (IP/MPLS) and packet microwave technology. The new network provides highly secure, resilient and reliable backhaul to support the new P25-based, next-generation public safety communications system with integrated voice and data capability and is ready for future adoption of Long Term Evolution (LTE). The new IP/MPLS network not only strengthened the responsiveness of public safety and other city services, but also significantly increased the city's overall network capacity. That allows the city to support a variety of additional municipal agencies and services—all with greatly simplified management and provision for higher reliability and cost efficiencies, and a highly scalable and reliable foundation for more advanced public safety communications capabilities in the future



City of San Diego Wavence network

This project covers deployment of twenty nine (29) links of Wavence Microwave radio, forty one (41) 7705 Service Aggregation Routers (SAR), four (4) 7210 SAS-Sx-48T Routers and a NSP Network Management System as part of the solution for City of San Diego's microwave/MPLS network. The Wavence microwave radios are configured for an all indoor installation with non-all microwave ring paths equipped for non-standby allowing the IP/MPLS layer to provide traffic management and network resiliency. Spur paths are configured for hot standby hardware protection. The microwave network is designed with a two-way availability objective of 99.999% (five nines) or better. All microwave radio paths have a bandwidth capacity of 220Mbps.

The Nokia Services organization oversaw all planning and program management of the project. These activities included;

- Communication Plan
- Scheduling
- Network and path engineering
- Path and site surveys
- Manufacturing, provisioning and testing of the equipment in Carrollton Texas
- Logistics for field activities
 - inventory of the material
 - installation of the microwave radio, antenna system, routers, NMS and DC Power systems
 - swept waveguide runs and aligned antennas
 - deinstallation of the legacy equipment
 - testing of the Nokia microwave network
 - final acceptance by the City of Fresno.
- Provided close out package that included

- path performance calculations
- site engineering
- tower analysis and mapping
- IP/MPLS network architecture
- RFC 2544 test, sweeps and as built drawings documents
- Customer Support Activities
 - Product Training

Microwave Deployment Services

Microwave Deployment Services provide the resources needed to deploy Microwave equipment in City of Fresno's network as more specifically described in the Statement of Work (SOW). Nokia Engineers worked with the City of Fresno to create a Microwave Design, define technical requirements, and determine the bill of materials required for the project. Installation technicians performed installation and commissioning of the equipment including tasks such as antenna system and radio system installation, test, and commissioning. Work was coordinated by dedicated project and program management resources managing other services including feasibility studies, path surveys, microwave path design, frequency planning, other equipment installation, and equipment removal. The following is a description of the key team member activities that drove the successful project for the City of Fresno.

Program Manager (PM)

The PM was the Nokia individual responsible for the day-to-day activities required for successful deployment and completion of the project. The PM maintained control of the project and has access to those resources required for successful completion of the work. The PM was the City of Fresno's primary point of contact during the performance of the work. Following is a list of key activities:

- Comply with the terms and conditions of the Agreement and Purchase Order
- Collaborated to develop a baseline Project Management Plan and Schedule Management Plan (Project Timeline) with baseline schedule that includes critical paths and key milestones.
- Coordinated and documented any scope changes in accordance with the Nokia change management process.
- Gained consensus/approval on a Communication Management Plan which includes status meeting location/duration/frequency, and reporting content and format with distribution list and media type. The plan also included exception reporting and escalations.
- Established a Change Management Plan, which is a change control system of formal documented procedures that define how project deliverables are controlled, changed, and approved.
- Managed Resources – allocate staff and other resources (e.g., equipment, laboratories, etc.), and gain commitment to project schedule.

- Analyzed and tracked project risks to verify that risks are identified, status is reported, and appropriate risk response plans were executed. Escalated and issued jeopardies as necessary.
- Managed close-out activities before any necessary resources were released. Verified that all activities within scope of Nokia's responsibility under accepted purchase orders were completed, including the mutually agreed upon Acceptance Test Procedure.

Microwave Network Engineer (NE)

The NE was the Nokia individual responsible for the Microwave Design portion of the project ensuring adherence to good engineering practice, responsiveness to City of Fresno's technical requirements and requests, and compliance with Nokia engineering standards. Following is a list of key activities:

- Provided system designs that met the City of Fresno's specifications and requirements.
- Defined the technical requirements and interfaces of OEM equipment supplied by Nokia.
- Provided a bill of materials based on the design requirements.
- Provided systems and network engineering support during equipment manufacturing and field deployment phases of the project.
- Provided factory network engineering drawings

3.1.3 Deployment Project Manager (DPM)

The DPM is the individual responsible for the day-to-day activities required for successful installation and commissioning of the Microwave equipment. The DPM had the resources at his disposal to complete the project on time and within City of Fresno's expectations.

- Coordinated the site surveys required to finalize the scope of work related to the specific project.
- Antenna systems and OEM equipment procurement
- Radio system installation
- Antenna system installation
- Radio system test and commissioning
- Antenna system test and commissioning
- Managed Installation of ancillary equipment supplied by Nokia
- Managed Services and Standard ATP

Transmission Engineering Services (TSE)

Included various engineering activities to gather information in support the design of the microwave paths and the development of the frequency plan for City of Fresno's microwave implementation project. Following is a list of key activities:

- Path feasibility study
- Path survey
- Path design
- Frequency Planning, Coordination, Licensing and Engineering

MPLS Network Architecture & Design

MPLS Network Architect worked with City of Fresno to produce a network detailed design which reflected the objectives and requirements for the network solution. This Service also included a network audit as part of the network migration strategy service. The network migration strategy covered the migration of City of Fresno's existing Ethernet based traffic architecture to the new Nokia IP/MPLS network architecture in accordance with the network detailed design while minimizing impact to the capabilities and services offered to existing customers. Following is a list of key activities:

- Developed a L2 MPLS network design document
- Lead a services and technical requirements workshop
- Developed a network detailed design document
- Performed a network audit from the existing Ethernet based network architecture
- Developed a high-level migration strategy

Network Integration – IP Service Routers

Nokia utilized the approved Network Design to develop the per-network element configurations, including system, routing, interface and network services needed to bring each Nokia router/switch in the designated network to an operational state. Nokia Network Integration team were onsite to test the configurations and verify successful integration into the City of Fresno network. Following is a list of key activities:

- Developed an and executed Acceptance Test Plan (ATP) to implement the new network elements
- Developed base configuration and/or full configuration files
- Delivered configuration files to installation teams

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