

NGEN Operations Board

NGEN Operations Board Action Item 24-007

Date: November 7, 2024

Presented by: Thomas Montoya

On behalf of: County of Monterey ITD

Request:

Approve and recommend the NGEN Executive Board approve the NGEN Radio System Access Administrative Policy.

Funding Source: N/A;

Summary/Discussion:

The Monterey County Next Generation Radio Network (NGEN system) is comprised of land mobile radio technology that provides Monterey County operational area radio coverage using supplemental and overlapping P25 digital trunked and analog conventional systems. The radio frequency channels interoperate seamlessly with dispatch consoles, a broadband push-to-talk service, and other interoperability systems. Public safety personnel across the state of California are supported by a variety of land mobile radio (LMR) systems in various frequency bands. This separation by radio systems and frequency bands may be overcome by technology standards, cross band patching systems and prior planning by public safety officials. Radio channels, frequencies, and talk groups should be programmed into each subscriber's radios in the event interoperable or mutual aid communications is required.

This policy was previously presented in the April 2024 NGEN Operations Board where it was tabled for further review and coordination. The policy has been transformed from focusing on only Mutual Aid and Interoperability and expanded to include the general onboarding for new NGEN subscribers including new NGEN Party members. This policy is specific to NGEN Radio System access as it relates to day-to-day system operations and utilization. It was further coordinated with NGEN Operations Board Chair, Vice Chair, Emergency Communications Department (ECD), Department of Emergency Management (DEM), and ITD Radio Shop to determine and distinguish the differences between this policy and the Tactical Interoperability Communications Plan (also referred to as TICP or TIC Plan). The TICP is a separately maintained document for use by the Monterey County Operational Area (MCOA) intended to outline the interoperable communications resources available within the tactical region, the entity that controls or manages each resource, and the operational procedures for the deployment and demobilization of each resource. TICP applies to the agencies and organizations that provide public safety and emergency response during major incidents or disasters, including local government jurisdictions; state and federal public safety agencies; and other quasi-governmental and non-government organizations (NGOs) whose primary purpose is to provide aid to the civilian population during major emergencies. The TICP is intended for the public safety or public service disciplines that respond to the scene of an emergency and to other organizations that first responders coordinate with in resolving an incident or crisis.

The purpose of this policy is to define the expectations of all subscribers who utilize the NGEN system. It provides information to prospective subscribers on how to request service and understand the basics of operating on the NGEN system. This policy defines the standard operating procedures and responsibilities of Monterey County staff, NGEN party members, and mutual-aid partners regarding

NGEN radio system access including description of related fees and billing, acceptable use, maintenance, covers operational guidelines and standards.

Staff Recommendation:

Recommend the NGEN Operations Board approve the NGEN Radio System Access Administrative Policy.

Fiscal Impact:

None.

Effect(s) of Failure to Approve Request and/or caveats:

New NGEN Party and mutual-aid members will onboard the NGEN system without a consistent process without this policy.

_____ **NGEN Operations Board Action** _____

Modification to requested action: Yes X No ___

MODIFICATION: Revise radio limit statement to address system utilization instead.

Vote Date 11/07/2024

Motion by Sam Klemek 2nd Doug McCoun Approved: Yeas X Nays ___

Signed by:
Keith Boyd, Undersheriff

FDC2E8CCGA134AE...
Keith Boyd, Chair

Yeas: 9

Nays: 0

NGEN Radio System Access Administrative Policy

November 12, 2024 (Version #5)

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Purpose

The purpose of this policy is to define the expectations of all subscribers who utilize the Monterey County Next Generation Radio Network (NGEN system). It provides information to prospective subscribers on how to request service and understand the basics of operating on the NGEN system.

NGEN Overview

NGEN System Description

The NGEN system is comprised of land mobile radio technology that provides Monterey County operational area radio coverage using supplemental and overlapping P25 digital trunked and analog conventional systems. The radio frequency channels interoperate seamlessly with dispatch consoles, a broadband push-to-talk service, and other interoperability systems. Public safety personnel across the state of California are supported by a variety of land mobile radio (LMR) systems in various frequency bands. This separation by radio systems and frequency bands may be overcome by technology standards, cross band patching systems and prior planning by public safety officials. Radio channels, frequencies, and talk groups should be programmed into each subscriber's radios in the event interoperable or mutual aid communications is required.

NGEN System Management

The NGEN system has various Parties involved each having dedicated responsibilities which may include governance, dispatch services, radio system utilization, and operations and maintenance of the system.

The NGEN Operations Board is responsible for developing and recommending requirements for services, capital improvements, policies, and protocols. The NGEN Executive Board makes recommendations that affect costs, cost sharing methods, budgets, and fiscal policies. The NGEN Boards collectively provide direction and decision-making on items such as operations, budget, strategy, and vision representing the NGEN Parties desire to work in partnership.

Monterey County Emergency Communications department (ECD) is A Monterey County department that provides dispatch and call-taking services through the 9-1-1 Services Agreement; manages agency billing of NGEN Operation & Maintenance (O&M) fees, debt service fees and funds disbursement from the NGEN Debt Service Fund and the O&M Fund.

Monterey County Information Technology department (ITD) is responsible for the maintenance and operational support of the NGEN System under the Agreement for NGEN Services and Governance (NGEN Agreement). The ITD Radio Manager represents the NGEN Operations Board interests and makes decisions on issues related to the day-to-day operation of the system and any urgent or emergency system operational or repair decisions. System repairs requiring planned and unplanned outages are coordinated with ECD. In coordination with the NGEN Operations Board, the Radio Manager recommends, develops, applies, and enforces policies, procedures, contracts, organizations, and agreements that provide the service levels as defined in the NGEN Service Level Agreement (SLA), an Exhibit to the NGEN Agreement.

Recommendations to add, delete, or modify system components, sites, channel capacity, performance enhancements, etc., that are not part of routine maintenance actions must be coordinated and approved by the NGEN Boards prior to implementation. ITD Radio Shop ("Radio Shop") is responsible for overseeing proper technical operations of all radio talk groups and may revoke system authorization, in coordination with ECD for dispatched talk groups, if subscriber unit(s) are causing harmful system interference and impacting operations due to misuse, technical malfunction, or any other reason. Radio Shop will coordinate with offending agency directly if it is determined the talk group being impacted is not dispatched / public safety.

Subscribing to NGEN

Eligibility

Local law, fire, EMS partners, and support services agencies such as Parole, Homeland Security, FBI, etc., and those agencies that can render mutual aid in the event of an emergency may be an eligible subscriber to the NGEN system.

Initial Consultation

When an agency is interested in becoming a NGEN subscriber, prior to completing any documentation, the agency should review this policy and consult with the Radio Shop. Contact information can be found below in the Notices Section. The Radio Shop will work with the agency to determine if the NGEN system will meet the agencies telecommunications service needs or clarify any questions regarding NGEN.

Subscriber (Membership) Types

The County of Monterey, a political subdivision of the State of California, in its capacity as the administrator of the Next Generation Radio System (“NGEN”) will enter into the applicable agreement with the subscribing agency.

There are two types of subscribers within the NGEN System:

1. **New NGEN Party Subscriber:** Agency requests to join the *NGEN Agreement* as a new NGEN Party subscriber with the intent to use the NGEN System on a regular basis and may require exclusive talk group(s). The agency may also request to join the 9-1-1 SA with intent to receive Dispatch Services from ECD.
2. **Mutual-Aid and Interoperability Subscriber:** Agency request to utilize NGEN talk groups when working with NGEN Parties during joint operations, emergency operations for mutual-aid and interagency communications, and other coordinated efforts in communications with 9-1-1 SA agencies. The agency would be required to enter into the *NGEN Mutual-aid and Interoperability Agency Radio Use Agreement*.

Radio Equipment

Subscribing agencies must provide their own radios. All equipment used on the NGEN System must meet FCC Title 47 Part 90 Code of Federal Regulations and be Phase 2 Digital Time Division Multiple Access (TDMA) P25-compliant with the most current

version upgrade installed to access NGEN talk groups. Frequency Division Multiple Access (FDMA), P25 Phase 1 only, radios are being phased out from use on the NGEN System and will no longer be permitted for new access request. The ability to function in TDMA/FDMA mixed mode is recommended with the plan to upgrade to P25 Phase 2. Encrypted channels require AES 256 encryption. Radios shall be equipped with multi-key encryption if accessing multiple talk groups that may have different encryption keys requirements. Radio Shop can provide specifications for agencies seeking to purchase compatible equipment.

Application Procedure

Agency requesting access is required to follow the steps listed below to join their radios to NGEN system.

1	<p>Applicant agency gathers information:</p> <ul style="list-style-type: none"> A. Applicant contacts Radio Shop for initial consultation. B. Applicant agency must identify a sponsoring agency who must be a current NGEN Party member agency. C. Applicant identifies the type of use: 1) New NGEN Party or 2) Mutual-Aid and Interoperability subscriber. D. ITD Radio Manager can provide cost estimates for subscriber programming fees if required and recurring fees for New NGEN Party subscribers to include NGEN O&M and NGEN Capital Fees. Buy-in fees will be determined at the discretion of the NGEN Executive Board. See Billing and Fees section below. E. Optional: Applicant agency may request to join the 9-1-1 SA with intent to receive Dispatch Services from ECD if they are requesting to join as a New NGEN Party.
2	<p>Applicant agency drafts a “letter of intent” (LOI) on the applicant agency’s letterhead.</p> <p>The letter should contain information on the purpose, requested access, area of operations and provide additional details such as a list of all individuals responsible for the project.</p>
3	<p>Applicant agency fills out the application forms:</p> <ul style="list-style-type: none"> A. NGEN SYSTEM ACCESS Request Form (Exhibit A) - Applicant agency identifies the talk groups which they are requesting access; countywide, primary dispatch for law/fire, etc.. B. Radio Identification Sheet (Exhibit B) - As needed; applicant agency may contact the Radio Shop for further assistance.

4	<p>Applicant agency sends completed forms and LOI via postal mail or email to Radio Shop:</p> <p style="text-align: center;">Radio Shop Manager Information Technology Department, County of Monterey 855 E. Laurel Dr, Building D, Salinas, CA 93905 Email: fccmgr@countyofmonterey.gov Office: (831) 796-6433</p>
5	<p>Required coordination with ECD:</p> <ul style="list-style-type: none"> A. if applicant is applying for dispatch services (9-1-1 SA) or; B. if applicant is requesting use of a talk group that is currently dispatched, but their agency is not specifically requesting ECD dispatch services (9-1-1 SA). <p>Applicant shall provide user information, obtain CAD ID's, confirm CLETS / DOJ clearance, discuss call signs, obtain any relevant dispatch standardization, policies and procedures.</p>
6	<p>ECD confirms necessary clearance, radio call signs, CAD ID's, etc.</p>
7	<p>Sponsoring agency, together with Radio Shop, submits agenda item to the NGEN Operations Board to request approvals for the applicant agency's access request.</p>
8	<p>Radio Shop summarizes all application materials into a Board Action Item</p>

9	NGEN Operations Board approves/amends/denies the Board Action Item.
10	NGEN Executive Board will be updated about the action item. Board will determine if there is a buy in fee.
11	ITD Radio Manager routes Agreement (New NGEN Party or NGEN Mutual-Aid and Interoperability Agreement) for signatures by applicant agency and the ITD Chief Information Officer.
12	<p>Subscriber Radio Programming:</p> <p>Subscriber radios shall be programmed based on their approved use. Refer to Operational Guidelines and Standards and subsection for radio programming herein for requirements.</p>
13	<p>Billing</p> <p>Radio Shop bills the applicant agency for the cost of radio programming (if applicable) and for performance validation (testing, applying appropriate encryption keys, and entering of subscriber radio information into the UAS).</p>

Fees and Billing

Subscription Fees

Fees and billing will be in accordance with applicable agreement. All subscribers are responsible for procurement, maintenance, repair, and replacement costs of their subscriber radios including mobiles, portables, base stations, remotes, and consoles.

1. **New NGEN Party Subscriber:** Agency fees are dependent on the quantity of subscriber radios registered and used on the system. Spare and cache radios are not factored into the billing methodology. Subscribers will be billed in compliance with the NGEN Agreement which can be referenced at <https://www.countyofmonterey.gov/government/departments-i-z/information-technology/ngen/>. NGEN Operations & Maintenance (O&M) and NGEN Capital Fees cover operational expenses, maintenance, and lifecycle replacement for infrastructure and future NGEN development. Rates for service are adjusted on an annual basis.
2. **Mutual Aid and/or Interoperability Subscriber:** There is currently no fee for this subscription type.

Programming Fees

If requested, Radio Shop provides cost proposal for programming of subscriber radios which may include staff labor, license features as required from radio manufacturers, and any other upfront cost. The subscriber will pay for all charges and costs of the Radio Shop for programming and performance validation of these radios.

Acceptable Use

The NGEN system is available for official use to assist the NGEN subscribers in meeting their daily operational and business requirements. Resources provided to the NGEN subscribers are strictly for the purpose of delivering day to day operations, public safety, and emergency services.

- (1) Only NGEN Parties or Mutual-Aid and Interoperability Partners subscribers with approved and active services agreements may use the NGEN System.
- (2) NGEN subscribers shall (a) comply with all laws, rules, and regulations and abide by all applicable statutes, laws, ordinances, including but not limited to those of the Federal Communications Commission (FCC), and (b) operate the equipment as to not cause undue interference with any other participants using the NGEN System
- (3) The NGEN System shall only be used for the legitimate operational and business requirements of its subscribers and Monterey County ITD. No personal business of any kind may be conducted on the NGEN System by subscribers or Monterey County employees.
- (4) Subscribers may only use Radio Shop approved radio equipment, with authorized and validated serial numbers, talk groups, and radio identification numbers (IDs). Release of the NGEN System Key, system and/or radio IDs, serial numbers, and encryption key and/or all other system specific and/or proprietary system information to unauthorized third parties is strictly prohibited.
- (5) Subscribers shall not provide equipment to any individual or agency to operate on the NGEN System who do have authorization to utilize the NGEN services.
- (6) Subscribers shall always keep all radio communications brief and to the point and for official business purposes only. Subscribers are responsible for the appropriate use of the system in accordance with adopted standard protocols. Proper radio etiquette is expected during all communications. Foul or abusive language will not be tolerated.
- (7) Failure to adhere to this policy will be addressed as defined in the subscriber NGEN Agreement Section 8 Term and Renewal of the Agreement

Authorized Personnel

Requesting agency shall not allow any unauthorized personnel to use radios that will be programmed with NGEN talk groups. Requesting agency personnel must attend Radio Fundamentals and Etiquette training offered by Monterey County Emergency Communication department.

Mutual-Aid and Interoperability Authorized Use

NGEN mutual-aid talk groups are for official use only. All communications on the NGEN frequencies are in accordance with Part 90, Subpart B of FCC Regulations

(Public Safety Radio Pool). NGEN mutual-aid agency transmits communications essential to official activities. Unofficial communications on NGEN are prohibited and can result in revocation of authority for use. Requesting agency's authorized personnel may use the NGEN talk groups only in the following situation:

- (1) When working with a 911 SA user agency during joint operations,
- (2) During disaster and extreme emergency operations for mutual aid and interagency communications
- (3) With the prior approval and/or reservation of a countywide talk group reserved through ECD.
- (4) During joint trainings with NGEN Members or Participants

Maintenance

The NGEN System is designed to provide emergency and non-emergency public safety communications to subscriber agencies. The NGEN System infrastructure (system core, microwave backhaul, and sites) maintenance is performed by Radio Shop adhering to the NGEN Agreement. Maintenance of subscriber equipment is the sole responsibility of the subscriber agency.

System Outages

If you are experiencing trouble with the system or an outage, call the ITD Service Desk at 831-796-1400 for 24/7/365 on call support. Service response requirements in the event of system malfunctions are defined in the NGEN Agreement Exhibit B – Service Level Agreement (NGEN Agreement SLA)

NGEN System Maintenance and Upgrades

Radio Shop may perform periodic system upgrades and/or decommission parts of the radio systems. Radio Shop will make best effort to ensure the system is backward compatible with NGEN mutual-aid agency's radios. Advanced notifications will adhere to the NGEN Agreement SLA.

Subscriber Radio and Equipment Maintenance

All NGEN System subscribers shall be responsible for the maintenance and repairs of the subscriber owned radio equipment including dispatch consoles, base stations, mobile and portable radios. All radios used on the NGEN System will be maintained to applicable FCC Title 47 part 90 of the Code of Federal Regulations. If a subscriber does not have resources for installation or maintenance of their equipment, they may request services through the Radio Shop which can be completed at an hourly time and materials (T&M) rate.

Operational Guidelines & Standards

The following guidelines are to be used when operating subscriber equipment on the NGEN System:

Monitoring

The NGEN System is monitored 24 hours a day, 7 days a week (24x7) by the Radio Shop.

Subscriber Supervisory Responsibility

Each NGEN Party and mutual-aid agency partner subscriber bears the responsibility for the compliance of operations on the NGEN system.

Talk Group Policies and Procedures

Policies and procedures surrounding the operational use of the NGEN talk groups will be provided by ECD.

Talk Groups

Authorized personnel are allowed to access and transmit only on those talk groups approved by the NGEN Operations Board. The following talk groups may be available for interoperable communications:

(1) Mutual-aid and interoperability digital talk groups

- County Wide 2
- County Wide 3
- County Wide 4
- County Wide 5
- County Wide 6
- County Wide 7
- County Wide 8
- County Wide 9
- County Wide 10
- County Wide 11
- County Wide 12
- County Wide 13
- County Wide 14
- County Wide 15
- County Wide 16

(2) Mutual-aid and interoperability analog talk group

- County Wide 4A
- (3) Unless responding in a mutual aid, emergency circumstance, permission to use 9-1-1 SA User Agencies individual talk groups must be pre-approved by NGEN Operations Board, NGEN Party subscriber agencies, and ECD.
 - (4) Encrypted channels require AES 256 encryption.

Radio Programming

Radio Shop authorizes all subscriber radios to function on the NGEN system by entering the subscriber radio information into the NGEN System's Unified Administration System (UAS) and applying the appropriate encryption key. Applicant must use County Radio Shop for encryption key loading. Applicable Fees and Billing apply; refer to section above.

For general programming of subscriber radios the subscriber agencies can either:

- (1) Use the Radio Shop for comprehensive radio programming, authorization, and testing including UAS entry and encryption key loading or;
- (2) Program their own radios or designate an authorized independent private service shop (not including UAS and encryption loading). System keys may be provided to subscriber agencies or their independent shop for radio programming of NGEN System frequencies. System keys must be surrendered immediately if requested by the Radio Shop. Request for system keys must be made in writing by submitting the NGEN System Key request form to the Radio Shop. Reference policy on system keys at <https://www.countyofmonterey.gov/government/departments-i-z/information-technology/ngen/>. Mobile/portable radio equipment will be equipped with a time-out timer which is set for no longer than 3 minutes. The subscriber will be responsible for all associated costs including all associated hardware for a system key.

Tracking of System Utilization

NGEN mutual-aid and interoperability agency subscribers' system utilization is subject to tracking and quarterly reporting. System utilization resulting in high resource allocation adversely impacting existing NGEN party agencies may lead to a review of the subscriber's status as a mutual-aid user.

Radio Identification

Radio Shop designates, programs, and logs agency radios' call signs as part of standardized programming to identify the agency and user of each radio.

Agencies must ensure its personnel identify themselves on the radio channel using the predetermined call sign.

Patching Prohibited

Agencies shall not permit its personnel to use frequency bridging equipment, a dispatch console or any other mechanism to "patch" or link any NGEN talk groups to any other system, channel, sub-system or communications bridging equipment. An exception may be requested in coordination with both ECD and Radio Shop to accommodate a special event, operation, mobile operation, disasters, or emergency situation.

Disabling Radios

Radio Shop may disable a subscriber agency radio temporarily or permanently in in coordination with both the subscribing agency and ECD dispatch. Examples of when Radio Shop may determine to disable a radio include, but are not limited to, (1) if the radio is malfunctioning, (2) if subscribing agency's authorized personnel assigned to that radio is using the radio in violation of the applicable agreement or this Policy, or (3) if the radio is in any way interfering with the NGEN communications.

Lost or Stolen Radio

In the event a radio programmed for NGEN talk groups access is lost or stolen, subscribers shall contact the Radio Shop (or call the ITD Service Desk at 831-796-1400 for 24/7/265 on call support) immediately and in any event no later than 24 hours. Radios will be inhibited from accessing the NGEN System. If the radio is subsequently found, the subscribing agency shall notify the Radio Shop to have the radio re-enabled for operation on the NGEN System.

Decommissioning and E-Waste of Radios

Subscribers shall contact the Radio Shop for proper decommissioning of radio assets including disposal of radio e-waste, radios to be donated, sold, traded, or any other transactions where subscribers are relinquishing ownership of radio

assets. Radio Shop will ensure the radios have been cleared (“wiped”) of all NGEN System data and information prior to subscriber agencies processing their planned transaction(s). Radio electronics are considered hazardous materials and must be disposed of appropriately. Radio Shop will coordinate and schedule delivery of all e-waste drop-offs with the IT Warehouse Facility drop-off location which has taken enhanced security measures minimizing the risk of theft and vandalism. Unscheduled drop-offs are not accepted. Radio Shop will complete any required surplus and e-waste forms required for validation by IT warehouse personnel. If necessary, subscribers will be responsible for the cost to acquire a contracted moving and storage company for transportation of large deliveries.

Notices

Unless otherwise specifically provided herein, all notices and other communications shall be in writing, addressed to the person and address set forth below and shall be (a) deposited in the U.S. mail, first class, certified with return receipt requested and with appropriate postage, (b) hand delivered or (c) sent via email:

Radio Shop Manager
Information Technology Department, County of Monterey
855 E. Laurel Dr, Building D, Salinas, CA 93905
Email: fccmgr@countyofmonterey.gov
Office: (831) 796-6433

From time to time any party may designate a new address or recipient for notice by written notice to the other party.

Termination

NGEN Party subscriber termination shall adhere to Section 8 Terms and Renewal of the NGEN Agreement.

For Mutual-aid and Interoperability subscribers, either party (NGEN or the subscribing agency) may terminate the applicable Agreement for any reason at any time upon 10 days written notice to the other party. Access to any talk group may be terminated immediately with a written request by the chief executive of a

NGEN user agency who is a primary user of the talk group.

Exhibit A. NGEN System Access Request Form

1. Name and Address of Requesting Agency:
2. Agency Point of Contact with Contact Information:
3. Purpose for Requesting Access (attach a signed agency letter)
 - a. Purpose for Access (select one)
 - i. New NGEN Party Subscriber
 - Does your agency require Dispatch Services (Yes / No)
 - ii. Mutual Aid, Interoperability, Jurisdiction Assistance, etc.
subscriber
 - b. Agency/Jurisdiction to access:
4. Type of Access:
 - a. Talk group(s) to Access:
 - b. Transmit, Receive, Encrypted:
 - c. Transmit, Receive:
 - d. Monitor via Radio:
 - e. Monitor via Scanner:
 - f. Be On:
5. Number of Users
 - a. Command:
 - b. Field:
 - c. Administrative:

Exhibit B. Radio Identification Sheet

Radio Make, Model, Bands:

Radio Serial #:

Call Sign:

Agent Assigned:

Agent Badge Number:

To be completed by Radio Shop

Date programmed:

Radio ID #:

Radio Alias: