Kansas NG911 PSAP Security Policy

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Prepared by	Security Subcommittee
Prepared for	Jay Coverdale, Chair Technical Committee

Document Change Record

Date	Author	Purpose

Contents

1 Introduction

This NG911 Security Policy ("Security Policy") reviews with each Public Safety Answering Point (PSAP) the essential aspects of security that ensure that the Kansas NG911 system is not compromised either accidentally or intentionally. Because NG911 is our Next-Generation of emergency response technology, some of these aspects remain the same, and some aspects are new or different.

2 Scope

The local PSAP may complement their local security policy with this NG911 Security Policy. For example, some PSAPs may have Kansas Criminal Justice Information Systems (KCJIS) security policies. However, this NG911 PSAP Security Policy shall establish the minimum security standard.

This PSAP Security Policy addresses only the protection of the Kansas NG911 infrastructure system that is leased by the Kansas 9-1-1 Coordinating Council ("Council") on behalf of the State, and it does not address PSAP data, records or process.

3 Purpose

The purpose of this PSAP Security Policy is to standardize the minimum security requirements for the protection of the Kansas NG911 system. Therefore, non-compliance with this NG911 Security Policy is subject to review by the Council and may, depending on the severity of the infraction, require remediation and/or corrective action of the deficiency.

4 Communication Plan

The NG911 Security Plan and supporting Policies are distributed by the PSAP Memorandum of Agreement (MOA) and posted on the Council website. Updates and changes to the Security Plan and Policies are communicated by program directives. NG911 Security is a standing topic at regional NG911 meetings and conferences such as Association of Public-Safety Communications Officials, International (APCO). Periodic security communication is essential for establishing and maintaining security awareness and compliance integrity.

5 Roles and Responsibilities

The chairperson of the Council Security Subcommittee serves as the NG911 Security Officer (NSO) and is the single point of contact for NG911 security issues. He or she is supported by the Security Subcommittee, the NG911 Administrator and the NG911 Liaison as described in table 1.

Table 1 NG911 Security Organization

NG911 Governance →	NG911 Operations →	NG911 Policy Structure
9-1-1 Coordinating Council Chair. *Final authority accepting NG911 security provisions*	**Executive Committee Chair**. *Security advisor to Council Chair*	Security Plans. *Provides general methodology for NG911 security*
Technical Committee Chair. *Heads the Security Subcommittee*	**Security Subcommittee Chair, NG911 Security Officer**. *Establishes and administers the NG911 security program*	Security Policy and Standards. *Stipulate compliance requirements*
Operations Committee Chair. *Security advise from Ops perspective*	**Training Subcommittee**. *Integrates security awareness*	Program Security Directives. *Interim security announcements as required for integrity*
Administrative Committee. *Governance, policy enforcement and independent security audit*	**NG911 Administrator**. *Evaluates NG911 security financial impacts*	NG911 Strategic Plan. *Establishes NG911 roadmap for the future*
GIS Committee. *Security advise from GIS perspective*	**DASC**. *Determines potential GIS data threats*	DASC Security Plan. *Defines GIS data security compliance*
NG911 Liaison. *PSAP security follow-up and feedback*	**Implementation Technical Support Specialist** (ITSS). *Addresses Operations and Maintenance (O&M) perspective*	NG911 Security Audit. *Periodic assessment and evaluation*
Change Advisory Board. *Addresses high-impact security related CORs*	**Change Control Board**(s). *Addresses Low-Medium impact security related CORs*	Change Management Plan. *Formal control mechanism for security changes*
Local Agency Security Officer (LASO)	**Local PSAP.** *Ensures that local PSAP implements and complies with security requirements*	Memorandum of Agreement. *PSAP agreement to abide by NG911 Security Policy*
Infrastructure Provider AT&T. *Furnishes security imbedded end-to-end Solution as a Service (SaaS)*	**AT&T 9-1-1 Resolution Center**. *Assures compliance of infrastructure such as network routers, switches, firewalls, workstations, storage devices.*	AT&T Security Statement. *NG911 infrastructure security compliance w/ federal, state and industry best practice requirements and expectations*

The Local Agency Security Officer (LASO) is responsible for the implementation, support and compliance with this Security Policy for their agency. The PSAP Manager is responsible for signing the Security Certificate of Conformance, Appendix A.

6 Training

Initial Security Briefing. Prior to go-live cutover, the LASO will receive an Initial Security Briefing that serves as initial security awareness training.

NG911 Welcome Kit. Prior to go-live cutover, the LASO will receive a NG911 Welcome Kit. The NG911 Welcome Kit contains a brief explanation of NG911 and overview of differences from the legacy environment. The Welcome Kit summarized the basics of this Security Policy and serves as awareness training.

NG911 Security Directives. From time to time, specific NG911 security issues may arise unexpectedly. In this case, a Security Bulletin is issued by the NG911 Liaison to all PSAPs. Then the issue is incorporated into the regional security refresher training materials.

NG911 Regional Security Refresher Training. Regional training such as APC0 is held throughout the year to refresh PSAPs on the criticality of key security topics.

7 Unacceptable Use

The purpose of the NG911 system is to provide the latest call handling technology available. It is intended for public safety and not for personal use. Therefore, NG911 end-users are expected to use NG911 for its intended purpose only. This includes but is not limited to social engineering and personal browsing of the Internet. For example, the PSAP Security Officer should instruct their call-taker not to use the system to access Facebook or "surf the Internet."

The NG911 equipment suite may include a dial-up modem for assessing the health and status of the equipment at the PSAP. This modem is dedicated to the NG911 system and the PSAP shall not use the modem.

8 Security Audit

The Council reserves the right to audit NG911 systems and procedures on a periodic basis to ensure compliance with this security policy. From time to time, a random security audit may be conducted to ensure the integrity of our NG911 system and compliance with this PSAP security program.

Following the Security Audit, a compliance report will be submitted to the PSAP and the NG911 Security Subcommittee. If necessary, the NG911 Liaison will assist the LASO to remediate any areas of concerns.

9 Security Incident Response

In the event of a security breach or compromise, the Agency shall contact the AT&T 9-1-1 Resolution Center at 866-722-3911 immediately. Within four (4) hours of the incident, the LASO shall complete and send a Security Incident Report (Attachment B) to the NG911 Liaison.

10 Physical Protection

The PSAP shall provide a physically secure location with both the physical and personnel security controls sufficient to protect NG911 and associated information systems.

The PSAP shall ensure adequate visitor access and control so as to not compromise the integrity of NG911. Normally, the PSAP has already imposed such requirements with their legacy E9-1-1 system.

The PSAP shall authorize and control NG911 system-related items entering and exiting the physically secure location. In the event that any NG911 equipment is lost, broken or stolen, including an Airbus Command Post, the Agency shall contact the AT&T 9-1-1 Resolution Center at 866-722-3911 immediately. Within four (4) hours of the incident, the LASO shall complete and send a Security Incident Report (Attachment B) to the NG911 Liaison.

11 Removable Media

Council or PSAP staff may only use the Council or PSAP removable media in their work computers. Council or PSAP removable media may not be connected to or used in computers that are not owned or leased by the Council or PSAP without explicit permission of the Council or PSAP Information Security staff.

Removable media shall be used for the manual transfer of GIS data updates onto the NG911 Vesta Locate Administration workstation for self-maintaining PSAPs and for the storage of GIS ancillary data, specifically NG911 Imagery. No other data or unrelated files may be stored on the removable media; it must be used solely for NG911 GIS data. The NG911 or GIS System Administrator is responsible for securely handling and storing media and shall ensure the media is securely disposed of when no longer required.

12 Identification and Authentication

User ID Requirements. The PSAP Manager shall require a unique logon ID to the Call Handling software system for every dispatcher (but not the PC Windows):

- This unique logon shall have a 4-character prefix corresponding to the PSAP County Code and Agency (Appendix D).
- The leading 4-character prefix may be followed by whatever remaining characters desired according to individual PSAP policy.
- The logon shall have maximum character length is 32 and use only alpha-numeric characters (no special characters such as “!@^&” may be used).

Password Requirements. PSAP shall include the following minimum standards for establishing passwords:

- Have a minimum length of eight (8) characters
- Not be a dictionary word or proper name (best practice)
- Not be the same as the User ID (best practice)
- Password shall not shared.

13 Software Installation

Employees may not install software on NG911 computing devices operated within the PSAP network.

14 Change Request

In the event that the LASO desires the Council to consider a change to the NG911 Security Policy, the LASO shall complete an NG911 Change Order Request (COR). A sample COR is provided in Appendix C.

15 Terms, Definitions, Acronyms

15.1 Acronyms

APCO	Association of Public-Safety Communications Officials, International
COR	Change Order Request
GIS	Geographic Information System
KCJIS	Kansas Criminal Justice Information Systems
LASO	Local Agency Security Officer
MOA	Memorandum of Agreement
NENA	National Emergency Number Association
NG911	Next Generation 911
NSO	NG911 Security Officer
PSAP	Public Safety Answering Point
SOP	Standard Operating Procedure

15.2 Terms

AT&T 9-1-1 Resolution Center. The end-to-end monitor and maintenance center NG911.

Call Handling Equipment. Is special equipment that allows PSAP call takers to accept, manage and, if necessary, transfer emergency 9-1-1 calls. Typically, this equipment is computer based and uses one or more monitors to facilitate the handling of emergency calls.

Customer Premises. Refers to the facility where the PSAP operates. Customer premises are specified in documents such as the SOR and Site Survey.

Customer Premise Equipment (CPE). Refers to the equipment that the Council's provider (AT&T) is furnishing at the PSAP in order to provide the hosted call handling service of NG911.

Jurisdiction. Refers to the geographic area served by a PSAP or the PSAP itself. Throughout this agreement jurisdiction refers to the geographic area served by, or Hutchinson/Reno County Emergency Communications.

Memorandum of Agreement (MOA). Document that forms the relationship and participation between the PSAP jurisdiction and the Council for the acquisition and support of NG911 hosted call handling services from the Council's provider AT&T.

Next Generation 9-1-1 (NG911). The national initiative for updating our outdated 9-1-1 call handling service with special emphasis on the increased dependency of our society on wireless (cellular) communication rather than traditional wireline telephone.

NG911 Administrator. Staff position for the Council responsible for the overall deployment and operation of Kansas NG911. The NG911 Administrator reports administratively to the Adjutant Generals Office, and reports programmatically to the Council Chairperson.

NG911 Implementation Technical Support Specialist (ITSS). Consultant for the Council has a primary responsibility for working with Kansas PSAPs providing technical guidance and support. The ITSS reports directly to the NG911 Administrator.

NG911 Liaison. Staff position for the Council responsible for the day-to-day relationship with Kansas PSAPs. The NG911 Liaison reports directly to the NG911 Administrator.

Operations Manager/Supervisor. This role has primary responsibility for operational oversight of the PSAP. The person filling this role possesses intimate knowledge of day-to day PSAP operations.

PSAP (Public Safety Answering Point) operated by a city or county that operates on a 24-hour basis and whose primary function is to receive incoming 911 requests for emergency assistance and relay those requests to the appropriate public safety responder or agency.

Telecommunicator. A person who answers incoming 911 requests for public safety assistance.

16 Appendix A - Certificate of Conformance

I certify that I have read, understand and agree to comply with all NG911 Council security policies, and guidelines. I further understand that failure to comply with these policies and guidelines may result in decision of the Council to temporarily disconnect the PSAP until the security infraction is corrected.

Further, in the event that the current LASO no longer has responsibility for security, his/her acting replacement shall be communicated immediately to the NG911 Liaison. The NG911 Liaison will then issue a new Certificate of Conformance.

_____ ____/ ____/ _____

PSAP Manager signs here.

_____

Print or Type Name of PSAP Manager here

_____ ____/ ____/ _____

NG911 Liaison signs here.

_____

Print or Type Name of NG911 Liaison here

17 Appendix B – Security Incident Report

ACTION Team: sample Report here with link to blank form (fully electronic mechanism, Scott)?

If the local agency encounters a NG911 security breach, compromise or infraction, then the Local Agency Security Officer (LASO) shall fill out this form and send email to the NG911 Liaison within two (2) hours of the incident.

<table>
<tr><td colspan="3">Kansas NG911 Security Incident Report
For instructions, refer to NG911 Security Policy. For assistance call NG911 Liaison (below).</td></tr>
<tr><td>Time/Date of Incident:
1500 hours, June 20, 2015</td><td>Time/Date of Report:
1330 hours, June 21, 2015</td><td>Date Resolved: June 25, 2015</td></tr>
<tr><td>Name of LASO:
Wyatt Randall</td><td>Location of Incident:
Shawnee City Comm. Center</td><td>Contact Information:
913-485-9911</td></tr>
<tr><td colspan="3">Incident Description:
• Visitor was processed correctly but was unattended during bathroom visit.
• Visitor entered PSAP control center and accidentally used personal thumb drive at workstation.</td></tr>
<tr><td colspan="3">Method of Detection:
Closed circuit monitoring.</td></tr>
<tr><td colspan="3">Corrective Action Taken:
• PSAP Security Officer called NG911 Liaison at 1630 hours, June 20, 2015.
• PSAP Security Officer called AT&T Resolution Center 866-722-3911 at 1650, June 20, 2015.
• Visitor thumb drive confiscated for analysis by NG911 security.
• Visitor asked to remain in our communication center until incident reported.</td></tr>
<tr><td colspan="3">Next Steps:
• Visitor booked into county jail pending investigation.
• NG911 Liaison told me to fill out this Security Incident Report and send to him today.
• NG911 Liaison will schedule an After Action Review (AAR) next week.
• PSAP Security Officer requested to appear before the NG911 Security Subcommittee for questioning during the AAR.</td></tr>
<tr><td colspan="3">Miscellaneous Information that you think we should know:
I am very sorry. I should have paid better attention during the annual security refresher.</td></tr>
<tr><td colspan="3">After completing this form, please send to the NG911 Liaison (list phone, email)</td></tr>
</table>

18 Appendix C - Change Order Request

ACTION Team: sample COR here with link to blank form (fully electronic mechanism, Scott)?

Use this Change order Request (COR) to request or recommend a change to any aspect of the Kansas NG9-1-1 program. For instructions, refer to our NG911 Change Management Plan. As each Step is completed, by the person filling out the form, it is understood that person is responsible on that date. This serves as an electronic signature, and no formal signature is required. However, for the completed COR to be consummated, it must be formally signed by the two (2) parties represented Step #7.

Step #1 **Requestor** completes this section of form, then sends to the Change Manager, Randall White.

Type Change: Emergency	**Date of Request:** 12/22/14	**Requestor:** Bill Kelly
Requestor's Org / Dept: OITS Networking	**Requestor's Phone:** 785-296-1861	
Priority: HIGH **Risk:** Low	**Program Area:** Infrastructure	**Service-affecting?** Y/N
Scope / Description: PSAP connectivity from Shawnee PSAP to Regional ESInet from single T1 to bonded 2xT1 circuit.		
Reason or Purpose of Change: Increase bandwidth to handle additional voice traffic.		
Performance Impact: 1.544 Mbps to 3 Mbps	**Schedule Impact:** at&t typical install interval is 30-45 days.	**Estimated Cost Impact:** From $250.42/mo to $472.35/mo incurred by PSAP.

Step #2 **Change Manager** completes this section of form, then sends to the CCB Chairperson of affected program area.

Received: 12/23/14	**Reviewed:** 12/24/14	**Change Mgr:** Randall White	**Phone:** 913-485-9911
ID: COR_00001			
Recommendation: Requests is reasonable			
Disposition: Forwarding to Technical Committee Chair for consideration.			

Step #3 **CCB Chairperson of affected area** completes this section of form, then sends to the CAB Chairperson, Scott Ekberg.

Received: 12/26/14	**Reviewed:** 12/27/14	**CCB Chair:** Jay Coverdale	**Phone:** 785-296-3937
Recommendation: Since the PSAP is likely to outgrow a bonded T1 bandwidth within nine (9) months, we recommend changing from the current T1 connectivity (1.544 Mbps) to a Fractional DS3/T3 circuit (44.736 Mbps). The schedule impact is 45-90 days. The cost impact is from $250.42/mo to $715.20/mo.			
Disposition: We returned this COR to Change Manager for reconsideration of change. Bill Kelly agreed that DS3 circuit is more cost effective in the near term.			

Step #4 **CAB Chairperson** completes this section of form, then either (a) returns to Change Manager for final disposition, or (b) sends to Executive Committee for an opinion.

Received: 12/28/14	**Reviewed:** 12/29/14	**CAB Chair:** Scott Ekberg	**Phone:** 785-438-8440
Recommendation: Since the PSAP is likely to outgrow a bonded T1 bandwidth within nine (9) months, we recommend changing from the current T1 connectivity (1.544 Mbps) to a Fractional DS3/T3 circuit (44.736 Mbps). The schedule impact is 45-90 days. The cost impact is from $250.42/mo to $715.20/mo and potential CLEC construction costs.			
Disposition: We returned this COR to Change Manager for reconsideration of change. Bill Kelly agreed that DS3 circuit is more cost effective in the near term. The COR will be changed accordingly. We are forwarding this COR to the Executive Committee for consideration of potential CLEC construction costs that could exceed $10,000.00 and affordable by the PSAP.			

Step #5 **Executive Committee Chairperson** completes this section of form, if requested, then returns to CAB Chairperson for final disposition.

Received: 12/30/14	**Reviewed:** 12/31/14	**Exec Chair:** Col. Stratmann	**Phone:** 913-826-1010
Recommendation: We agree that DS3 service is prudent. The Council will cover up to $8,000.00 construction costs.			
Disposition: We are returning this COR to the CAB for final processing.			

Step #6 **CAB Chairperson** returns the final COR to the Change Manager for records and final disposition.

Received: 01/02/15	**Reviewed:** 01/03/15	**CAB Chair:** Scott Ekberg	**Phone:** 785-438-8440
Recommendation: Approve change of Shawnee PSAP connectivity from current T1 to DS3 service. The Council will cover up to $8,000.00 in potential construction costs. Program Manager to request formal quotation from CLEC, and fast-track implementation schedule Not Later Than (NLT) 60 days.			
Disposition: As of 01/04/15 we are returning this approved COR to the Change Manager for final disposition.			

Step #7 **Formal Signatures for this COR**. Normally, this is the NG911 Administrator for the Council

_____, ____/ ____/ 2015 _____, ____/ ____/ 2015

NG911 Program Manager NG911 Administrator

Notes:

1. *All changes are subject to terms and conditions of original contract(s).*
2. *Any supporting information must be attached to this COR. Some examples might be cost models (Admin), technical trade studies (Tech), work flow diagrams (Ops), Data Model (GIS).All CORs and their supporting data **must** be stored on our Program Portal.*

19 Appendix D - PSAP Code

PSAP Name	PSAP Code
Allen Co.	ALCO
Anderson Co.	ANCO
Andover PD	BUAN
Atchison Co.	ATCO
Augusta DPS	BUAU
Barber Co.	BACO
Barton Co.	BTCO
Brown Co.	BRCO
Butler Co.	BUCO
Chase Co.	CSCO
Chautauqua Co.	CQCO
Cherokee Co.	CKCO
Cheyenne Co.	CNCO
Clark Co	CACO
Clay Co	CYCO
Coffey Co	CFCO
Coffeyville PD	MGCO
Colby PD	THCO
Comanche Co	CMCO
Concordia PD	CDCO
Cowley Co	CLCO
Crawford Co	CRCO
Decatur Co	DCCO
Dickinson Co	DKCO
Doniphan Co	DPCO
Douglas Co	DGCO
Edwards Co	EDCO
Elk Co	EKCO
Ellsworth Co	EWCO
Ford Co	FOCO
Franklin Co	FRCO
Ft. Scott PD	BBFS
Garden City PD	FIGC
Graham Co	GHCO
Grant Co	GTCO
Gray Co	GYCO
Greeley Co	GLCO
Greenwood Co	GWCO
Hamilton Co	HMCO
Harper Co	HPCO

Harvey Co	HVCO
Haskell Co	HSCO
Hays PD	ELHA
Hodgeman Co	HGCO
Horton PD	BRHO
Hutch/Reno	RNHU
Independence PD	MGIN
Jackson Co	JACO
Jefferson Co	JFCO
Jewell Co	JWCO
Johnson Co	JOCO
Junction City PD	GEJC
Kansas City, KS PD	WYKC
Kearny Co	KECO
Kingman Co	KMCO
Kiowa Co	KWCO
Labette Co	LBCO
Lane Co	LECO
Larned PD	PNLA
Leavenworth Co.	LVCO
Leavenworth PD	LVLV
Leawood PD	JOLW
Lenexa PD	JOLN
Liberal/Seward Co	SWLB
Lincoln Co.	LCCO
Linn Co.	LNCO
Logan Co.	LGCO
Lyon Co	LYCO
Marion Co.	MNCO
Marshall Co.	MSCO
McPherson Co.	MPCO
Meade Co.	MECO
Miami Co.	MICO
Mitchell Co.	MCCO
Morris Co.	MRCO
Morton Co.	MTCO
Nemaha Co.	NMCO
Neosho Co.	NOCO
Ness Co.	NSCO
Norton Co.	NTCO
Osage Co.	OSCO
Osborne Co.	OBCO
Ottawa Co.	OTCO

Overland Park PD	JOOP
Parsons PD	LBPA
Phillips Co	PLCO
Pittsburg PD	CRPT
Pottawatomie Co	PTCO
Prairie Village PD	JOPV
Pratt Co.	PRCO
Rawlins Co.	RACO
Republic Co.	RPCO
Rice Co.	RCCO
Riley Co.	RLCO
Rooks Co.	ROCO
Rush Co.	RHCO
Russell PD	RSRS
Salina PD	SASA
Scott City PD	SCSC
Sedgwick Co	SGCO
Shawnee Co	SNCO
Shawnee PD	JOSH
Sheridan Co	SDCO
Sherman Co	SHCO
Smith Co	SMCO
Stafford Co	SFCO
Stanton Co	STCO
Stevens Co	SVCO
Sumner Co	SUCO
Trego Co	TRCO
Wabaunsee Co	WBCO
Wallace Co	WACO
Wamego PD	PTWA
Washington Co	WSCO
Wichita Co	WHCO
Wilson Co	WLCO
Woodson Co	WOCO