

Kansas NG911 Operations Change Management Policy

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Prepared by	Operations Committee
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Document Change Log

Date	Author	Change	Reason
08/12/15	Scott Ekberg	Minor content editing	Better alignment with CM Plan
07/12/16	Randall White	Page 7: CM from PM to Liaison	Liaison position filled by Lori

Contents

1	Introduction.....	4
2	Scope	5
3	Purpose	5
4	Reference Documents	6
5	Change Management Authority	7
6	How to Request a Change	7
7	Definitions, Abbreviations, Acronyms	8
8	NG911 Change Order Request Form	10
9	NG911 Change Order Request Sample.....	12

1 Introduction

The Council’s Change Management (CM) Plan is an approach to transitioning PSAPs, NG911 implementation teams, products and services to a desired future state. The NG911 CM Plan helps the Kansas 9-1-1 Coordinating Council to both understand and to minimize the risk of changes to our statewide Next Generation 911 service. The CM Plan establishes the change methodology for NG911. It is supported by various change policies such as this Operations Change Management Policy. These change management policies establish the process and procedure for reviewing and implementing change.

Because the Council Committees (Administration, Operations, Technical, GIS) have different roles and responsibilities, each has developed their own CM policy. Each CM policy is slightly modified and tailored to manage within their respective circle of influence. Nevertheless, each CM policy and process is completely compatible with our overarching NG911 CM Plan. Therefore, each CM process must be applied in the context of the NG911 CM Plan as shown in Figure 1.

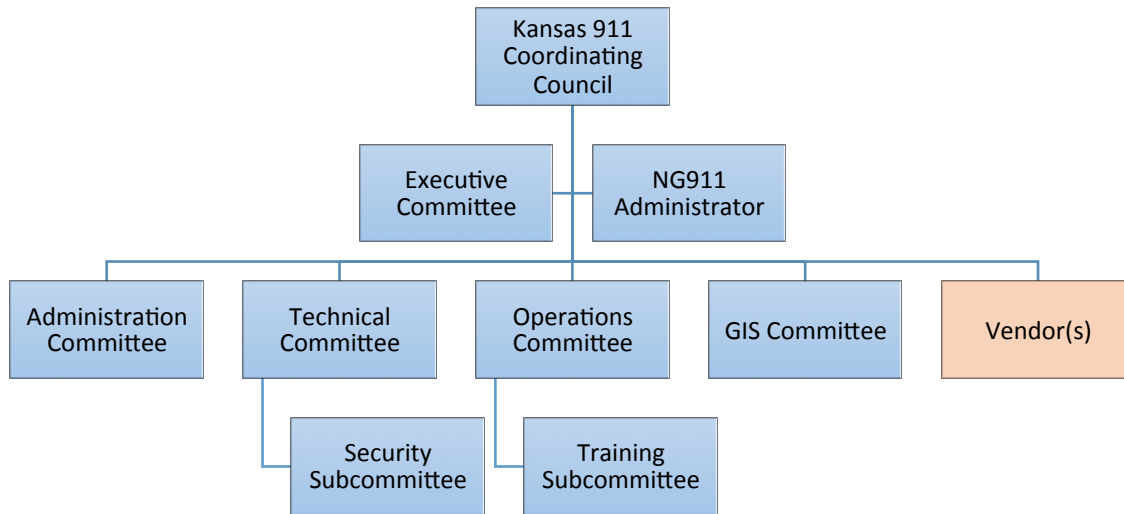


Figure 1 Kansas NG911 Change Management Hierarchy

The objective of this Operations Change Management Policy is to ensure that changes to the NG911 service are systematically evaluated, authorized, recorded, prioritized, planned, tested, and implemented in a controlled manner.

2 Scope

The Change Management Plan provides processes and procedures for four (4) types of changes:

- **Minor Change**
A Minor change is a change that will have minimum impact of current process and would allow for the implementation of low-risk, well-understood changes which do not require release of deployment management.
- **Normal Change**
A change that follows a pre-defined workflow within the documented Change Management processes.
- **Emergency Change**
Time Critical and potentially high-impact changes that require change outside of the normal process and would require the involvement of the Emergency Change Advisory Board (ECAB).
- **High Risk Change**
A High-Risk Change is a change that must be implemented as soon as possible. Essentially, it will follow the same Normal Change procedure with a few exceptions. Most notable are potential process changes that may require the consensus of the Change Advisory Board (CAB) described below. Or may require prior testing to fully document the change and configuration data. High risk changes may require following Emergency Procedures.

3 Purpose

The primary purpose of this CM Plan is to provide our high-level methodology while relying on our supporting CM Policies to do the “heavy lifting” aspects of change management within their specific areas. For example, since the NG911 infrastructure (ESInet, Network Monitoring and Management (NMM), Data Centers, Call Handling) is furnished as a turn-key fully-integrated solution and service, the infrastructure vendor has primary responsibility for change within their span of control. As the i3 systems and service are implemented, those too will come under the purview of this CM Plan.

Typical aspects of change management are:

- **Availability Management:** assesses the impact of changes on service(s) accessibility.
- **Capacity Management:** verifies the impact of changes on services over an extended period of time.
- **Configuration Management:** verifies the impact of changes in relationship to other equipment or services of NG911.
- **IT Service Continuity Management:** verifies the potential impact on business and service continuity.
- **Incident Management:** requests changes to resolve incidents including those caused by other changes.
- **Problem Management:** identifies new errors, including those resulting from a change, and resolves those errors.
- **Release Management:** assesses the implementation of new releases to include hardware, software, and processes, verifying the impact of a potential change using testing where feasible.

- **Service Level Management:** determines the impact of changes to business services, discussing high visibility or potential high-impact change with customers prior to implementing the change.

4 Reference Documents

The following reference documents are available for additional information if desired:

- Kansas NG911 Strategic Plan
- Kansas NG911 Governance Plan
- Kansas NG911 Communication Plan
- Kansas NG911 Security Policy
- Kansas NG911 Change Management Plan
- NG911 PSAP Memorandum of Agreement

5 Change Management Authority

The Change Management Structure consists of five (5) management tiers for approval and/or disapproval of non-standard change as shown in Figure 2.

1. **Council Executive Oversight Committee** provides final authority to change agents, when and if required.
2. **Change Advisory Board (CAB)** ensures that all NG911 Committees are informed of potential changes within a Committee. The CAB also ensures that contemplated changes of one Committee do not adversely affect the other Committees. CAB membership includes the chairperson of each Committee, NG911 Administrator, NG911 Liaison, and Program Manager.
3. **Committee Change Control Board (CCB)** serves as the administrative entity providing management and operation of NG911. The CCB provides tactical approval of all changes associated with their Committee. Membership includes the NG911 Administrator, Committee Members, vendor(s) associated with Committee, and is chaired by the Committee Chairperson.
4. **Change Manager** is responsible for the receiving, recording, processing and handling of all Change Order Requests (CORs). The Change Manager is the NG911 Liaison.
5. **Change Requestor** is the person who is submitting the COR. Any NG911 stakeholder may submit a COR using the COR form below.

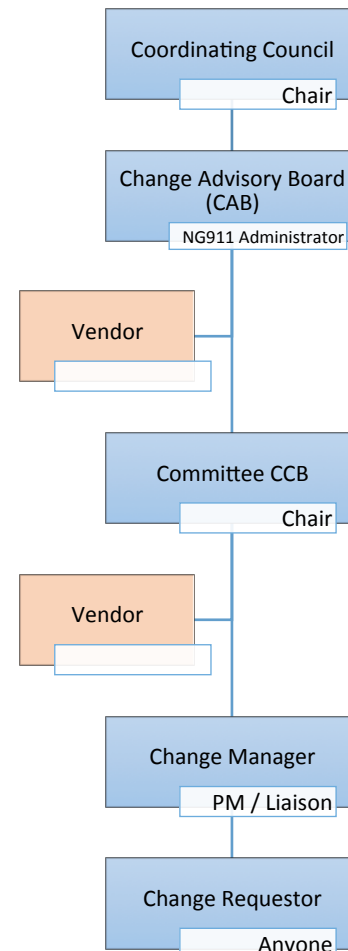


Figure 2 NG911 Change Mgt. Structure

6 How to Request a Change

Anyone may request a change to any aspect of NG911 and the process is easy. A few typical examples of requested changes are:

- Requesting additional NG911 seats
- Suggesting a change to a NG911 policy
- Requesting a change in our training program

Step-1

The person requesting the change completes a Change Order Request form below. A sample form is also provided below.

Step-2

The Operations Committee reviews the COR and either accepts or rejects the requested change. If the COR affects NG911 as a whole, the COR may be submitted to the Change Advisory Board (CAB) for its opinion.

Step-3

If the COR is approved and is local to the PSAP, the COR is returned to the Requestor with explanation for acceptance, and the process of change is implemented at the PSAP level.

If the COR is approved and is statewide in nature, the COR is returned to the Requestor with explanation for acceptance, and the change is implemented statewide following the NG911 Communication Plan.

In the event that the COR is rejected and the Requestor believes that the COR was not fully understood, or that the COR deserves a second look, the Requestor may resubmit the COR with additional information for CCB reconsideration.

7 Definitions, Abbreviations, Acronyms

ALI	Automatic Location Identification (ALI) is a service whereby a PSAP call taker is automatically given the emergency 9-1-1 caller's <u>address</u> . This service uses a tabular database that is associated with CAMA trunks that are provided by the PSAP's LEC carrier.
ANI	The Automatic Number Identification (ANI) is a service whereby a PSAP call taker is automatically given the emergency 9-1-1 caller's <u>telephone number</u> . This service uses a tabular database that is associated with CAMA trunks that are provided by the PSAP's LEC carrier.
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.
CAMA trunk	Centralized Automatic Message Accounting (CAMA) is actually a call log that is based on the traditional telephone line ("trunk" or "circuit") from the LEC to the PSAP.
CCB	Change Control Board is to approve changes at a level established by the Change Advisory Board. The Board should consist of the Change Manager, key technical and management staff of the respective Council Committee, and, as required, representation from the Change Advisory Board, stakeholders, user communities and vendor(s).
Change	An increase or decrease in any of the project characteristics, usually referring to specifications.
Change Control	The process of controlling, documenting, and storing the changes to control items. This

	includes proposing the change, evaluating it, approving or rejecting it, scheduling it and tracking it.
Change in Scope	A change in objectives, specifications, work plan, cost or schedule that results in a material difference from the terms of previously granted approval to proceed.
Change Management Process	A set of tasks or procedures established to ensure that project performance is measured to the baseline and changes are reviewed, approved or rejected, and the baseline updated.
Change Order Request	A documented request from anyone to change an aspect of NG911. Typical examples include, but are not limited to, change in policy, hardware, software, method of procedure.
Customer Premises	Refers to the facility where the PSAP operates. Customer premises are specified in documents such as the SOR and Site Survey.
CPE	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. Typically, this is a small router or switch similar to that provided in homes for cable TV service.
Geospatial Routing	Relies on a GIS database to identify the location of the emergency 9-1-1 caller on a map using X-Y coordinates rather than current MSAG, ALI and ANI tabular databases. Various layers of information can be added to the map to provide the call taker with enhanced information relative to the location to improve emergency response and routing of the call.
GIS	A Geographic Information System (GIS) is a system that correlates an emergency 9-1-1 callers location to a map database in order for the PSAP call taker to route and direct emergency responders accurately and quickly to the location of the emergency.
LEC	Local Exchange Carrier (LEC) refers to the telephone company ("carrier") for a locality. Examples are AT&T, CenturyLink, Pioneer Communication, and many others in Kansas.
MOA	This document is the Memorandum of Agreement (MOA). It 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.
MSAG	The Master Street Address Guide (MSAG) is a tabular database
NG9-1-1	Next Generation 9-1-1 (NG911) is a 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.
PSAP	The Public Safety Answering Point (PSAP) is a local center where emergency 9-1-1 calls are routed. Typically, PSAPs are located at a county level such as a county sheriff. They are also located at a local level such as a police department.
Service Acceptance	Is the PSAP's acknowledgement that they have received NG911 call handling services as defined in the SOR and MOA.

SOR	The Service Order Request (SOR) is that initial document completed by the PSAP with the NG911 Administrator. It expresses the general desire to participate in NG911 and collects general information to begin the process of defining the requirements of the PSAP. The SOR is a precursor to the MOA.
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8 NG911 Change Order Request Form

The NG911 Program Portal is designed to handle all COR's. That is, a COR can be initiated, processed and archived through our Portal. The Portal is constructed to emulate and replace the manual forms originally used for our COR's, as shown below. The use of manual COR forms is discouraged.

Type Change: see CM Plan		Date of Request:		Requestor: name	
Requestor's Org / Dept:			Requestor's Phone:		
Priority:		Risk:		Program Area:	
Service-affecting?					
Scope / Description: Enter here					
Reason or Purpose of Change:					
Performance Impact:		Schedule Impact:		Estimated Cost Impact:	
Received: date		Reviewed: date		Change Mgr: Randall White	
Phone: 913-485-9911		ID:			
Recommendation:					
Disposition:					
Received: date		Reviewed: date		CCB Chair:	
Phone:		Recommendation:			
Disposition:					
Received: date		Reviewed: date		CAB Chair: Scott Ekberg	
Phone:		Recommendation:			
Disposition:					
Received: date		Reviewed: date		Exec Chair: Col. Stratmann	
Phone:		Recommendation:			
Disposition:					
Received: date		Reviewed: date		CAB Chair: Scott Ekberg	
Phone: 785-438-8440		Recommendation:			
Disposition:					
Signature		Date		Signature	
NG911 Program Manager				NG911 Administrator	

9 NG911 Change Order Request Sample

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.			

