

Emergency Communications System Lifecycle Planning Guide

Fact Sheet

Background

In 2011, the Department of Homeland Security (DHS) Office of Emergency Communications (OEC) released the Emergency Communications System Lifecycle Planning Guide (Lifecycle Guide) to better enable practitioners to plan for and deploy public safety communications systems. It defined system lifecycle phases, goals and products, stakeholder involvement, roles and responsibilities, and items for consideration in each phase. The Lifecycle Guide also provided recommendations for agencies interested in building, maintaining, and operating an emergency communications system through decommission and replacement. Since the 2011 Lifecycle Guide, the emergency communications ecosystem has evolved with new policies, stakeholders, advanced technologies, and critical risks impacting system lifecycle planning.

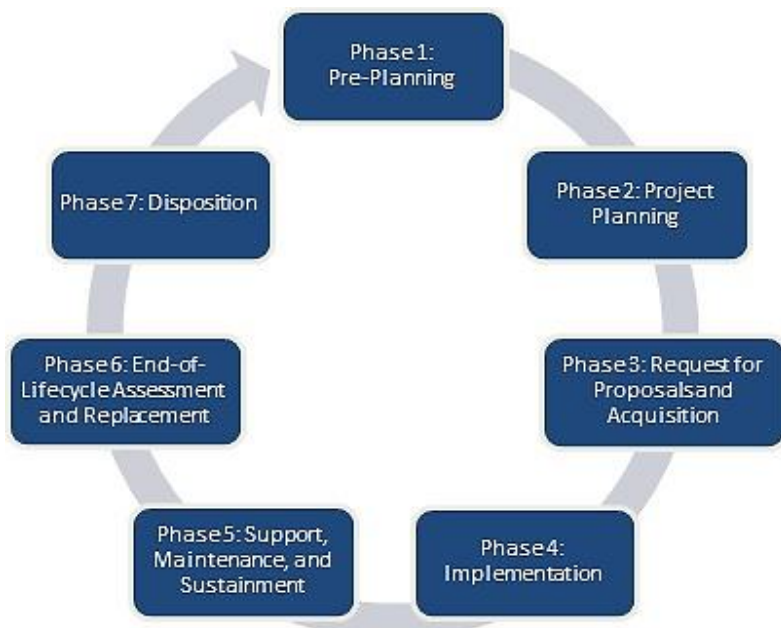


Image of a Radio Communications Tower

To account for these changes, OEC developed a compendium to the *Lifecycle Guide* in 2018, in collaboration with the Joint SAFECOM and the National Council of Statewide Interoperability Coordinators (NCSWIC) Funding and Sustainment Committee. The Compendium updates the lifecycle planning model to emphasize pre-planning activities to secure funding for the entire life of the system. It clarifies system lifecycle planning is not a one-time investment. Elected officials and decision-makers must better understand communication systems maintenance and funding requirements throughout the lifecycle. In response, OEC recommends specific steps and tools to assist project planners who aim to convey system lifecycle information to leaders.

Updated System Lifecycle Planning Model

The 2018 Compendium describes each phase—Pre-Planning; Project Planning; Request for Proposals (RFP) and Acquisition; Implementation; Support, Maintenance, and Sustainment; End-of-Lifecycle Assessment and Replacement; and Disposition—including best practices, considerations, suggested timelines, and recommended checklists to assist public safety agencies embarking on system lifecycle planning. The checklists are designed to be torn-out, referenced, and utilized by project management teams throughout the system lifecycle.



Updated System Lifecycle Planning Model.

Phase 1: Pre-Planning

Pre-planning of a new system requires approval to proceed from agency officials, appropriators, legislators, executive-level state leaders, the public, or several of these groups. It is one of the most difficult steps for public safety officials. The goal of this initial phase is to inform and to secure the decision to replace, upgrade, maintain, dispose of, and/or acquire a communications system. Activities include establishing the core planning team; researching system and funding options; deciding on optimal and alternative solutions with funding options; planning for frequency needs and channel programming; developing a business case, presentation materials, and strategic plan; identifying a legislative- or executive-level project champion; and presenting to decision-makers and securing funding to support the initial build-out and to sustain the system throughout the entire lifecycle.

Phase 2: Project Planning

System planning occurs after a strategic decision has been made to replace, upgrade, maintain, dispose of, or

acquire a system. The goals of this phase are to formalize the project management team; identify and approve the operational and technical requirements for system replacement or upgrade; and develop the project plan to include key elements such as the purpose, objectives, timeline, and budget. Agencies should consider how long the planning process can take and communicate expected timeframes to elected officials. Activities include collecting user needs and requirements and incorporating into project plans; engaging with communications leaders early for guidance and support; identifying strong project sponsors; and beginning plans for RFP development.

Phase 3: RFP and Acquisition

This third phase provides guidance on RFP development and acquisition, including identifying specific costs associated with emergency communications projects, as well as ongoing costs. The goals of this phase are to select the appropriate procurement vehicle, oversee an objective review process, and procure necessary systems and system components. Activities include developing a written action plan; forming the RFP team; developing the Statement of Work; including specifications or requirements in the RFP; establishing written evaluation criteria; and conducting a formal objective review process and documenting results.

Phase 4: Implementation

Implementation activities occur after purchasing the system. The goals of this phase are to develop a detailed implementation plan; install and test new systems or components; transition or cut-over to new systems; update operational procedures and train users; and promote new capabilities and benefits to the community. There are implementation. Project planners should identify

Public safety officials make numerous decisions to fund, plan, procure, implement, support, and maintain communications systems, and eventually replace and dispose of systems and components. This continuous system lifecycle planning can be daunting. To assist officials, the *2011 Emergency Communications Systems Lifecycle Planning Guide*, the 2018 Compendium, and other resources are available at <https://www.dhs.gov/safecom>.

About SAFECOM/NCSWIC

SAFECOM's membership includes more than 60 members representing local, tribal, and state government, including elected and appointed officials, state emergency responders, and major intergovernmental and national public safety associations who provide input on the challenges, needs, and best practices involving emergency communications. NCSWIC is comprised of the Statewide Interoperability Coordinators (SWICs) and their staff from the 56 states and territories. Email questions to SAFECOMGovernance@hq.dhs.gov and NCSWICGovernance@hq.dhs.gov.

often hidden costs and financial considerations during residual costs and develop a plan to cover expenses for successful migration to new systems or components.

Phase 5: Support, Maintenance, and Sustainment

Once a system has been installed, tested, and accepted, the agency enters the Support, Maintenance, and Sustainment Phase of the lifecycle. The goals of this phase are to inventory and maintain the system and equipment, manage the budget, and continually assess and communicate needs with decision-makers. Activities include maintaining an accurate inventory of equipment, as well as determining and executing an ongoing maintenance and operations model.

Phase 6: End-of-Lifecycle Assessment and Replacement

Previously entitled Refreshment, as technology refreshment does not necessarily mean system replacement, this phase includes the infusion of technology advancements due to external influences, such as a new standard or interoperability need. However, a system will eventually reach its end-of-life and need to be replaced. The goals of this phase are to conduct ongoing assessments of current systems, refresh or upgrade systems as needed to extend the life, and determine when to replace the system or components with solutions to best fit operational and technical needs.

Phase 7: Disposition

As the final phase, system disposal is often the least considered activity during system lifecycle planning. The goals and activities of this phase include developing the disposition plan and ensuring minimal impact to operations of the new or upgraded system; determining options in consideration of legal or policy limitations, and business requirements; briefing leaders on disposition plans; and identifying lessons learned following disposition.

