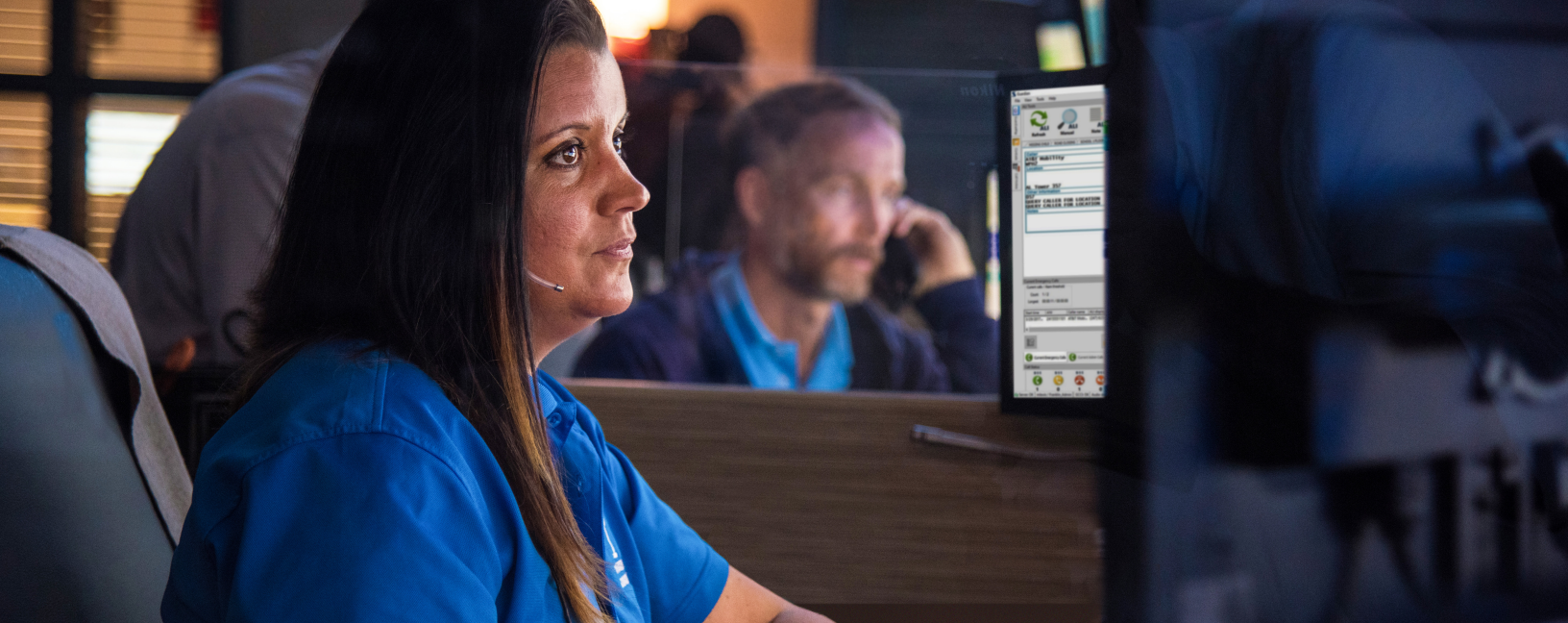




Selecting the Right NG9-1-1 Call Management System

A Five-Step Primer to Help You Choose a System That Matches Your Requirements and Budget

A Solacom Guide



Today, every Public Safety Answering Point (PSAP) in the U.S. is at some point along the path to delivering Next Generation 9-1-1 (NG9-1-1) services. Selecting the right NG9-1-1 emergency call handling and management system is central to a PSAP's evolution.

The call handling and management system determines the:

- Call types and formats that are accepted
- Routing rules for transferring calls to call takers
- Caller details and supporting information that is available to call takers
- Human resources that call takers can contact for assistance
- Speed at which abandoned calls can be resolved

With the significant push toward NG9-1-1, PSAPs can choose from a variety of call handling and management systems

with different capabilities and price points. Knowing the most important areas to focus on during discussions with vendors helps PSAPs select a call management system that delivers the optimal combination of capabilities for the price and for today and tomorrow.

The following five steps are provided to help guide you through the selection process. In addition to talking to vendors about each of these topics, we recommend that you include the relevant questions in your requests for proposals (RFPs) so you have each vendor's responses in writing.

Ensure Long-Term Commitment to the NENA i3 Standard



The call management system must comply with the NENA NG9-1-1 architecture standard *Detailed Functional and Interface Standards for the NENA i3 Solution*. Commonly referred to as the NENA i3 standard, this document is the universally acknowledged basis for public safety deployments of NG9-1-1 systems.

The i3 standard describes protocols, interfaces, and systems to locate users who contact 9-1-1 using voice, video, text, data, and other means. It also describes the system capabilities and components required to route communications to the appropriate PSAP, and to allow for easy transfers, failovers, and multi-party calls.

Most vendors will tell you their system complies with the NENA i3 standard, but it's important to press for details. There is no governing body that provides a seal of approval or a stamp to verify that an NG9-1-1 system is truly i3-compliant. There are different versions of the standard, the standard continuously evolves, and it will continue to do so.

NENA i3 COMPLIANCE: FIVE KEY QUESTIONS TO ASK

- 1 What version of the NENA i3 standard does your system comply with today?
- 2 Which features within that version of the standard does your system not support?
- 3 How will you provide upgrades as your system supports new capabilities in the standard?
- 4 What extra costs are associated with those upgrades?
- 5 Will you put it in writing that your system will continue to comply with the NENA i3 standard without requiring a major system redesign or major equipment replacements?

It's important to verify that the system supports the key capabilities in the most recent version of the NENA i3 standard. To maintain NENA i3-compliant operations without breaking your budget, it's also very important to confirm that the vendor has developed a smooth and cost-effective roadmap to support future versions of the standard without major organizational upheaval or infrastructure replacements on your part.

Look for a Flexible, Highly Customizable System

To ensure a smooth transition to NG9-1-1 services, the call management system must adapt to the way your PSAP works. It must efficiently handle all of your call flow requirements. And it must be intuitive, flexible, and fully customizable so it's fast and easy for call takers to use from day one with minimal training.

When evaluating call management systems, look for systems that offer a standardized configuration and user interface that can then be customized to suit your individual processes and preferences.

For example, you may want a user interface that closely resembles your current system — right down to the ringtone. Or, you may want to evolve to a new look and feel that reflects the evolution of your organization to NG9-1-1. You may want a single, standard user interface for all call taker positions. Or, you may need several different user interfaces, each of which is customized for a different role or area of expertise within your organization.

Key user interface features to look for include:

- Customizable icons and buttons
- Buttons sized for touch screen operation
- Mute, privacy, and hold buttons
- Buttons sized for call takers with visual disabilities
- Intelligent call transfer buttons that allow call takers to select the type of outgoing call based on the type of incoming call
- Multimedia interfaces for non-voice communications, such as text-to-911, outbound texting, instant messaging, and TDD/TTY

While some call management systems provide templated user interface variants, many do not offer any customization capabilities beyond those fixed options. As a result, these systems may not provide the level of flexibility and customization needed to address all of your call flow and usability requirements.



FLEXIBILITY AND CUSTOMIZATION: FIVE KEY QUESTIONS TO ASK

- 1 How can the system be adapted to handle my specific call flow requirements?
- 2 How does the system optimize access to NG9-1-1 call handling features?
- 3 Which specific aspects of the user interface can be customized for my requirements?
- 4 How can the user interface be adapted to resemble my current system?
- 5 How can the user interface be customized for the individual roles and responsibilities in my organization?

Insist on a Purpose-Built System With an All-Inclusive Feature Set

Evaluating NG9-1-1 call management systems is a bit like shopping for a car or buying a new house after touring the model home. The salesperson is more than happy to show you the highest-level model with the ultimate feature set. You love it all. Then you find out that many of the most appealing features are not included in the model you can afford. Every one of them is an extra cost.

The same practice occurs regularly in sales of NG9-1-1 systems. A system that starts out as low-priced can quickly become extremely expensive once you add the required features.

In other cases, you may find that the system was not specifically designed for NG9-1-1 call management. Instead, it has been modified to accommodate NG9-1-1 calls. These systems sometimes provide an inferior feature set because they are trying to serve multiple purposes, but are not dedicated to any single purpose.



PURPOSE-BUILT, ALL-INCLUSIVE: FIVE KEY QUESTIONS TO ASK

- 1 What other purposes was this system built to address?
- 2 Which features are included in the base price?
- 3 What is the cost of additional features and upgrades?
- 4 What is the process to add features down the road?
- 5 How does your system integrate with existing mapping systems, CAD systems, video sources, instant messaging (IM) systems, and external databases?

Systems that are purpose-built for NG9-1-1 call management and that include a comprehensive feature set in the base price provide the best long-term value for the money. All-inclusive systems give you access to key NG9-1-1 features from day one, so you can gradually integrate them into your processes without additional costs or upgrade hassles. The all-inclusive approach also simplifies operational and financial planning for your organization.

Key features to look for in an all-inclusive offering include automatic call distribution (ACD), multiparty conferencing for dozens of people with no degradation of audio quality, in-screen video displays, and silent call monitoring.

Ensure Timely Access to Expert Support Services

While most NG9-1-1 systems are highly reliable, there will inevitably be times when assistance is required.

To ensure continuous delivery of NG9-1-1 services, the vendor must offer rapid access to expert services and support for the hardware and software components that comprise the system. Delays in accessing the right level of support can quite literally mean the difference between life and death.

Call management systems that include proactive monitoring and response services help to prevent the risk of system slowdowns or breakdowns. You may not even be aware there was an issue with the system until after it is resolved.

For example, remote monitoring may reveal that software in a key component requires an update. With proactive services, a software patch can be remotely applied by a technician with no interruption to NG9-1-1 services or involvement from you. If physical repair is required, the technician is immediately dispatched to your site. In contrast, monitoring services that simply identify issues then pass the follow-up task on to another service provider introduce delays and complicate the process.

Rapid access to technical experts who are specialists in your NG9-1-1 system is also important. There's a significant difference in the level of technical expertise that can be provided by third-party general support personnel who may also be supporting other vendors' products and people who work for the company who designed and developed the system.

When technicians and support personnel are part of the vendor's team, they are fully dedicated to understanding and supporting your system. These in-house experts know the system inside and out. They also have instant access to the development team. In some cases, they may have contributed to the product development themselves.



SERVICES AND SUPPORT: FIVE KEY QUESTIONS TO ASK

- 1 What proactive monitoring and support services do you offer?
- 2 Who provides your monitoring and support services?
- 3 What technical credentials specifically related to this system do your service and support team members have?
- 4 How are system maintenance tasks handled?
- 5 What are your committed response times for remote service and for on-site service?



Beware of Hidden Costs

When comparing prices from multiple vendors, make sure you are comparing similar levels of features, upgrades, and support services over the long term.

In an attempt to offer more attractive pricing, some vendors will provide an initial system price that does not include costs that will come up down the road. This can result in a number of financial surprises that add up over time as you find yourself forced to add key software capabilities or switch out hardware.

Software updates are a prime area where costs may be hidden. As the NENA i3 standard evolves and vendors update their systems, you need the ability to incorporate new features at the lowest possible additional cost. Knowing that the vendor includes the majority of software updates in the initial purchase price gives you peace of mind and helps with long-term financial planning.

Another tactic to keep the initial price low is to offer call management systems in basic, intermediate, and advanced versions. While the basic system price is attractive, you will very likely want to take advantage of more sophisticated features in the near future as your operations evolve. That means moving to a higher tier system and potentially adding significant costs.

HIDDEN COSTS: FIVE KEY QUESTIONS TO ASK

- 1 What hardware and software are included in the base price?
- 2 How do you handle hardware and software updates?
- 3 What costs are associated with those updates?
- 4 What is the cost of system monitoring, support, and service?
- 5 Can you provide a five-year summary of all expected costs?



Partner With a Dedicated NG9-1-1 Innovator

Solacom provides flexible, user-centric NG9-1-1 call handling and management systems that are designed to evolve smoothly with your operations over time. Our purpose-built Guardian 9-1-1 solutions comply with the latest NENA i3 standard, are fully customizable, and include all of the key features needed for efficient NG9-1-1 call handling and management.

Solacom is a dedicated partner that provides leading-edge NG9-1-1 technologies and unrivaled support over the long term. Our solutions are built on more than 30 years of research and innovation in advanced technologies for public safety. And our teams have been deeply involved in developing and ratifying today's industry standards. As an innovator in NG9-1-1 systems, we've been able to deliver numerous industry firsts, including:

- First Geospatial Router in operation
- First demonstration of USDOT proof of concept
- First national deployment that replaced DMS-100 tandems for 9-1-1 selective routing
- First national deployment using direct IP connectivity from a Local Exchange Carrier (LEC)
- First fully IP-hosted customer premise equipment (CPE) ESnet
- First NENA-certified NG9-1-1
- First statewide NG9-1-1 system

Today, Solacom Guardian 9-1-1 solutions support thousands of agencies affecting millions of lives annually — from dense urban environments to statewide deployments.

STAND OUT FROM THE CROWD WITH SOLACOM

Leading PSAPs and state and local governments are partnering with Solacom for NG9-1-1 call management. Find out why:

- » Maine implements the first statewide NG9-1-1 system in the U.S.
- » Central Kentucky PSAPs create centralized network to save costs
- » Rural counties in Florida become i3-ready
- » Owensboro-Daviess County consolidates city and county 9-1-1 services



Additional Information

[Click here](#) for more information about how Solacom can help you make the move to an integrated, future-ready NG9-1-1 call management solution for your PSAP.

Contact Us

Contact us today to discover how our Guardian solutions can help your PSAP streamline 9-1-1 call management processes and enable more efficient collection of critical information in emergency situations.

Visit our website: www.solacom.com



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