

E-BOOK

E911: The ultimate guide to compliance



Understanding the enterprise pathway to compliance

The United States has been [relying on 911 calls since 1968](#) to ensure help is available in dire and often life-threatening situations.

Before then, citizens needed to dial local 10-digit phone numbers to reach police, fire, or emergency services and provide detailed instructions on where they were and how they could be found. Fast-forward to today and roughly [240 million 911 calls](#) are made yearly to the nearly 6,000 public safety answering points (PSAPs) around the country through this vital public safety service.

But telecommunications and user behavior has changed dramatically since the 1960s. Now, over 80% of 911 calls [come from mobile devices](#). Businesses have rapidly adopted cloud-based communications, making traditional methods of identifying the caller's location obsolete.

New telecom technologies, changing user behavior, and remote work have driven the creation of new laws to protect users in emergency situations. These new laws are intended to provide the public safety we've come to expect, regardless of the device used, its location or underlying technology. Anyone who dials 911 should be connected to the correct PSAP, and the operator should know exactly where to send first responders.

E911, or Enhanced 911, is the part of the 911 system which automatically ties a location to the call, whether it's a specific address or coordinates. Two laws, Kari's Law and RAY BAUM'S Act (Section 506), were passed in the U.S. and have gone into effect, providing improved access to 911 services. These E911 laws also require organizations to re-examine their telecom stack for compliance to ensure everyone's safety. It's especially critical in today's evolving remote and hybrid work cultures to protect employees wherever they may work — in an office, on the road, or at home.

NOTE: The information contained in this document is not legal advice. We aim to provide information and guidance, but you should consult a legal professional to determine how this information impacts your organization.

Let's examine the critical need for E911 compliance, why your current telecom stack may be lacking, and how you can overcome critical challenges to ensure your communication services are creating the safest possible work environment.

Discover how to protect your employees, minimize risk, and avoid costly penalties.



Why you need to prioritize E911 compliance

E911 compliance is required by law, but it's not the only reason you should care. Let's explore the important reasons why you should invest the time and resources necessary to ensure your employees and visitors can reach 911 when they need it.

Provide a safe working environment for everyone

Employees trust their employers to create the safest work environment possible. Regardless of your industry, decision-makers should do everything in their power to prevent injuries in the workplace.

But sometimes accidents happen even in low-risk environments, like the office. The incident might not be related to working conditions but a result of the employee's health and medical history.

Whatever the cause, someone at work may find themselves in a situation where they need emergency services. Employees, coworkers or visitors must be able to reach the local PSAP with their desk phones, softphones, or mobile devices. And first responders need to know precisely how to find the person at risk.

E911 compliance ensures anyone who needs emergency assistance can dial 911 and reach an operator to immediately dispatch help. An E911 compliant communications system will supply the operator with all the required information necessary to locate the caller, including additional location information first responders need in large and complex environments — like floor number, room number, etc.

Avoid costly fines and penalties

Failing to comply with E911 regulatory requirements may result in fines and penalties, especially for businesses knowingly non-compliant. Fine amounts will vary and may change over time depending on FCC regulations.



Protect your reputation and government standing

Your organization's reputation may be damaged if an employee needs emergency assistance and can't receive it because of non-compliant, outdated phone systems. Investing in E911 compliant communications will help protect your employees while maintaining your high standards and reputation.

Many states in the U.S. also require companies to stay in good standing with state governments for grant or loan eligibility. Filing payroll information and tax status, for example, is required for good standing, but having fines related to non-compliance may harm a company's reputation and eligibility for special financing.

Prevent civil lawsuits

Fines related to non-compliance aren't the only potential financial costs involved. Employees or visitors unable to reach emergency services who, as a result, sustain more significant injuries may file civil suits against your company.

A civil suit could potentially harm your company's reputation while draining its finances. Ensuring E911 compliance can help avoid these situations or prove the phone system was not the issue if a lawsuit is filed.

What's missing from your telecom stack?

A common problem enterprises face is using both legacy technologies and modern cloud-based communications in tandem. The telecom stack may get the job done, but is it E911 compliant?



Your telecom stack needs specific capabilities, including:

- The ability for 911 to be dialed directly without a prefix, such as 9, to reach an outside line.
- All information about the caller's location must be passed to the 911 operator, whether working at a home office or in a corporate building.
- The caller should be routed to the correct PSAP serving their location, even if they're working remotely or traveling around the country.
- Timely notification to staff when a 911 call has been made to facilitate building entry by first responders, including a valid callback number and the same location information conveyed to the PSAP.

If your telecom stack can't handle all of the above capabilities, it's imperative to modernize it with the proper E911 compliant solutions. It's not optional! It's a requirement based on two key FCC laws.

E911 regulations you need to understand

Two significant laws have been passed — RAY BAUM'S Act and Kari's Law — which plainly dictate E911 compliance requirements. Some solutions may comply with one of these laws and not the other. However, you must meet the requirements of both laws to be confidently compliant.

RAY BAUM'S Act (Section 506)

RAY BAUM'S Act has a wide scope, but Section 506 refers to the rules related to E911 compliance.

Section 506 requires enterprises using multi-line telephone systems (MLTS) to provide 911 operators with automated dispatchable location information for every 911 call made throughout the enterprise — including remote workers.

Dispatchable location information includes all necessary information first responders need to find the caller, such as:

- ✓ Civic address
- ✓ Building number
- ✓ Floor
- ✓ Suite or room number



This information must be provided for every call, whether the user makes the call with a static desk phone or a softphone on a nomadic device.

Imagine a first responder showing up to a massive office campus and only having the primary street address. The responders would have to work with receptionists or security to discover where they need to go, costing the caller valuable time.

Conversely, a first responder arriving with accurate dispatchable location information allows them to quickly identify the detailed location of the caller, such as the building, suite or floor, improving response time.

The difference in response time between these two scenarios can play a significant role in providing life-saving emergency services.

RAY BAUM'S Act was passed in late 2019, and a window was offered to reach compliance. However, this window closed in January 2022. Any business with an MLTS is expected to comply.



Kari's Law

Kari's Law dictates all MLTS must be capable of reaching 911 without the barrier of an added prefix, such as 9, to reach an outside line, while adding requirements for real-time notification.

The law was passed in 2018 in response to Kari Hunt Dunn's passing. She could not receive life-saving emergency services because her nine-year-old daughter did not know dialing 9 was necessary to reach an outside line from their hotel room. The child continually dialed 911, but it never reached the local PSAP.

An additional requirement of Kari's Law is for designated emergency response personnel within the facility to also be notified of all 911 calls. Notifications can be phone calls, texts, emails, or on-screen messages. However, this should not intercept the 911 call.

For example, if someone in a large office building calls 911, the in-building security team will receive an alert. This added notification will allow local personnel to find the caller and prepare for first responders' arrival.



Local- and state-level regulations

United States regulations are often a patchwork of local, state, and federal regulations. The two laws mentioned above describe regulations at the federal level. However, you may have additional local and state law requirements. Be sure to investigate other applicable regulations to become fully E911 compliant.

How to comply with E911 regulations

Now we know the importance of E911 compliance and more about the specific laws dictating the requirements organizations face. But how can you upgrade your telecom stack to comply?

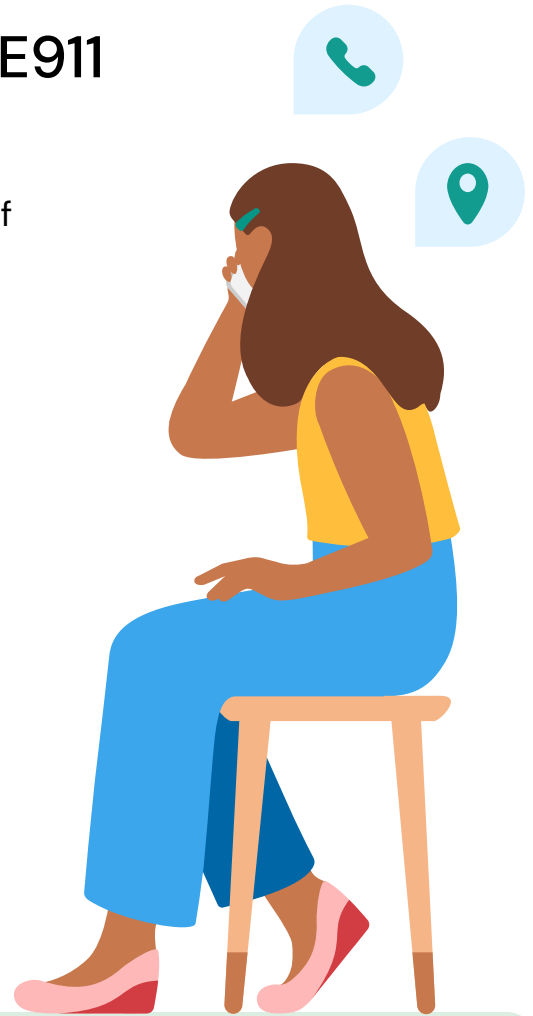
Your current telecom stack is likely customized to your business and may involve legacy and modern technologies. This unique patchwork means you'll need to create a strategy, evaluate your exact system, and take steps to become compliant. Start the process by building a meaningful strategy.



Elements of a comprehensive E911 compliance strategy

A comprehensive, compliant E911 strategy consists of several critical components:

- **Maintain accurate user location information:** Every 911 call from your MLTS must provide the operator with automated information about the caller's location, including relevant floor and room numbers.
- **Ensure emergency calls are routed to the correct PSAP:** If your office is in one town, but an employee is using a softphone in another city outside the area, their 911 call needs to go to a PSAP where the individual is physically located.
- **Eliminate prefixes to reach 911:** Dialing 911 should take callers directly to their local PSAP without adding prefixes to reach an outside line.
- **Notify on-premises staff of 911 calls:** Designated personnel should receive an alert about any 911 calls made within the facility to reach the caller as soon as possible while waiting for emergency responders to arrive.



Consult your legal team

The above strategy covers the federal guidelines, but you need to understand other potential regulations. Contact your legal department for help analyzing relevant laws and identifying any necessary changes to build your E911 strategy and comply with all relevant regulations.

Evaluate the effectiveness of existing systems

Can your existing system meet the goals of your compliance strategy? For example, removing the need for a prefix to reach 911 can often be done without additional software, but meeting the other requirements may call for an upgrade.

Location provisioning to determine the precise location of calls made from softphones and automatically supplying it to PSAP operators may require changes to your tech stack. Likewise, providing on-site personnel with notifications about 911 calls may also require additional software or services.

Not every VoIP service provider can meet all E911 compliance requirements. You may need to change providers or purchase supplemental services to ensure you are compliant and adequately prepared for emergency situations.

Emergency calls must integrate with internal emergency policies

You need a system capable of notifying designated internal personnel about every 911 call made on your MLTS. Just as important is having a written policy outlining who will receive these notifications. Does your current policy have you covered?

It's vital not to delay 911 calls because of internal notification. Doing so could risk your compliance and slow response times for life-saving services. Instead, you need software and policies to trigger a notification but allow the 911 call to reach the local PSAP operator immediately with all relevant information.

Understand the needs of a hybrid workforce

The hybrid workforce is here to stay, and remote workers must be considered as you pursue E911 compliance. You can't count on remote workers using their landlines or mobile phones to call 911 — your softphone may be the best option during an emergency.

All of the same requirements for on-site employees also apply to remote workers. Internal personnel must be notified, 911 must be reached without a prefix, and the PSAP operator must have automated dispatchable information.

You may only require an updated configuration of existing telecom software or additional solutions for off-site workers. Keep the needs of hybrid workers in mind as you pursue updating your telecommunications capabilities to become E911 compliant.

Conduct frequent tests

After you've ensured your telecom stack is fully E911 compliant, set up an initial test to confirm functionality. Test it often for ongoing compliance, confidence, reliability, and security.



How to test 911 calls

Dial 933: Many providers have instituted 933 as a specific emergency call testing number — designed to not interfere with live 911 calls.

Preschedule live 911 test calls: Some local regulations allow 911 calls for testing. But it's critical to first check with your PSAP by calling their non-emergency line to plan ahead and preschedule any test calls prior to dialing 911.

Partner with Sinch to achieve industry-leading E911 compliance

Achieving E911 compliance may be a complex task for enterprises with legacy technologies or simplistic VoIP providers. However, your organization must create a detailed strategy to update your phone system and meet the outlined requirements.

E911 compliance ensures employees throughout the enterprise can quickly access life-saving services and guarantee responders can easily find the caller. You'll also avoid costly fines, damage to your reputation, and potential civil lawsuits.

An easy route to E911 compliance is partnering with the right, experienced telecommunications provider. Sinch is an industry leader in E911 services and compliance, offering solutions for STIR/SHAKEN, access to a best-in-class network with 99.999% uptime reliability, and much more.



Ready to become E911 compliant without the hassle? Talk to an E911 expert today to discover how easy upgrading your telecommunications services can be with the right partner.

To find out more, please visit:

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