

FCC Consumer Advisory

VoIP and 911 Service

The ability to access emergency services by dialing 911 is a vital component of public safety and emergency preparedness. It is imperative that consumers of telephone service be able to reach emergency services regardless of the technology used to place a 911 call. To ensure that a consumer's choice of Voice over Internet Protocol (VoIP) for telephone service does not adversely affect that consumer's ability to access emergency services, the Federal Communications Commission (FCC) has taken steps to require that providers of "interconnected" VoIP services (VoIP services that use the Public Switched Telephone Network (PSTN), including wireless networks, to originate and terminate calls) meet Enhanced 911 (E911) obligations. E911 systems automatically provide to emergency service personnel a 911 caller's call back number and, in most cases, location information.

What Is Interconnected VoIP Service?

Interconnected VoIP service allows you to make and receive calls to and from traditional phone numbers using an Internet connection, possibly a high-speed (broadband) Internet connection, such as Digital Subscriber Line (DSL), cable modem, or wireless broadband. It can be used in place of traditional phone service. Typically, interconnected VoIP technology works by either placing an adapter between a traditional phone and Internet connection, or by using a special VoIP phone that connects directly to your computer or Internet connection. While you may choose to use interconnected VoIP service from a single location, like a residence, some interconnected VoIP services can be used wherever you travel, as long as a broadband Internet connection is available. Companies offering interconnected VoIP service call it by a number of different brand names. To find out more about VoIP service, see the FCC's consumer guide at www.fcc.gov/guides/voice-over-internet-protocol-voip.

The Public Safety Challenges of VoIP Service

Traditional phone services have generally associated a particular phone number with a fixed address. Portable interconnected VoIP service enables consumers to take their home or business phone service almost anywhere. Because certain interconnected VoIP services are portable, or can be used from virtually any Internet connection anywhere, the location of the caller may not be capable of being determined automatically.

This portability raises a number of challenges for the emergency services community. Although the FCC has taken action to make sure that emergency calls from these VoIP services will get through to the appropriate public safety authorities, there are still possible differences between VoIP E911 and traditional wireline E911 service, so there are certain things that consumers need to know.



When you call 911 from a traditional telephone, the call in most cases is sent to a Public Safety Answering Point (PSAP) that is responsible for helping people in a particular geographic area or community. PSAP personnel often can automatically identify your location and direct the closest emergency personnel to that location. They also often can automatically identify your telephone number so that they can call you back if you are disconnected.

Since VoIP service works differently from traditional phone service, consumers who use it should be aware that VoIP 911 service may also work differently from traditional 911 service. VoIP service providers, in response to FCC action, are making progress in eliminating these differences, but some of the possible differences include:

- VoIP 911 calls may not connect to the PSAP, or may improperly ring to the administrative line of the PSAP, which may not be staffed after hours, or by trained 911 operators;
- VoIP 911 calls may correctly connect to the PSAP, but not automatically transmit the user's phone number and/or location information;
- VoIP customers may need to provide location or other information to their VoIP providers, **and update this information if they change locations**, for their VoIP 911 service to function properly;
- VoIP service may not work during a power outage, or when the Internet connection fails or becomes overloaded.

To reduce these differences and any possible risks to public safety posed by interconnected VoIP 911 service, the FCC has imposed the following requirements:

- All interconnected VoIP providers must automatically provide 911 service to all their customers as a standard, mandatory feature without customers having to specifically request this service. VoIP providers may not allow their customers to "opt-out" of 911 service.
- Before an interconnected VoIP provider can activate a new customer's service, the provider must obtain from the customer the physical location at which the service will first be used, so that emergency services personnel will be able to locate any customer dialing 911. Interconnected VoIP providers must also provide one or more easy ways for their customers to update the physical location they have registered with the provider, if it changes.
- Interconnected VoIP providers must transmit **all** 911 calls, as well as a callback number and the caller's registered physical location, to the appropriate emergency services call center or local emergency authority.
- Interconnected VoIP providers must take appropriate action to ensure that their customers have a clear understanding of the limitations, if any, of their 911 service. All providers must specifically advise new and existing customers, prominently and in plain language, of the circumstances under which 911 service may not be available through the interconnected VoIP service or may in some way be limited in comparison to traditional 911 service. They must distribute



labels to all customers warning them if 911 service may be limited or not available and instructing them to place the labels on and/or near the equipment used in conjunction with the interconnected VoIP service.

- Interconnected VoIP providers must obtain **affirmative** acknowledgement from all existing customers that they are aware of and understand the limitations of their 911 service.
- In some areas, emergency service providers are not capable of receiving or processing the location information or call back number that is automatically transmitted with 911 calls. In those areas, interconnected VoIP providers must ensure that a 911 call is routed to the appropriate PSAP.

Limitations of Other VoIP Services

- Subscribers of VoIP services that do not fully interconnect with the PSTN should be aware that providers of those services are not currently required to comply with the FCC's 911 and E911 rules.

Tips for Subscribers to Fully Interconnected VoIP Service

If you have or are thinking of subscribing to an interconnected VoIP service, you should:

- Provide your accurate physical address to your interconnected VoIP service provider to ensure that emergency services can quickly be dispatched to your location.
- Be familiar with your VoIP service provider's procedures for updating your address, and promptly update address information in the event of a change.
- Have a clear understanding of any limitations of your 911 service.
- Inform children, babysitters and visitors about your VoIP service and its 911 limitations, if any.
- If your power is out or your Internet connection is down, be aware that your VoIP service may not work. Consider installing a backup power supply, maintaining a traditional phone line or having a wireless phone as a backup.
- If you have questions about whether the phone service you are receiving is an interconnected VoIP service, contact your service provider for further information.
- PSAPs currently lack the technical capability to receive texts, photos and video.



Filing a Complaint with the FCC

If you have been unable to access emergency services while using VoIP service, you can file a complaint with the FCC. There is no charge for filing a complaint. You can file your complaint using an FCC online complaint form found at www.fcc.gov/complaints. You can also file your complaint with the FCC's Consumer Center by calling 1-888-CALL-FCC (1-888-225-5322) voice or 1-888-TELL-FCC (1-888-835-5322) TTY; faxing 1-866-418-0232; or writing to:

Federal Communications Commission
Consumer and Governmental Affairs Bureau
Consumer Inquiries and Complaints Division
445 12th Street, SW
Washington, D.C. 20554

What to Include in Your Complaint

The best way for you to provide all the information the FCC needs to process your complaint is to complete fully the online complaint form. When you open the online complaint form, you will be asked a series of questions that will take you to the particular section of the form you need to complete. If you do not use the online complaint form, your complaint, at a minimum, should indicate:

- your name, address, email address and phone number where you can be reached;
- the name and phone number of the company that you're complaining about; telephone number involved, account number, date of incident and description of the problem.

For More Information

For more information about interconnected VoIP and 911, visit the FCC's VoIP 911 website at www.fcc.gov/voip. For more information about VoIP in general, see the FCC's consumer guide at www.fcc.gov/guides/voice-over-internet-protocol-voip. You can also contact the FCC's Consumer Center using the information provided for filing a complaint.

For this or any other consumer publication in an accessible format (electronic ASCII text, Braille, large print, or audio) please write or call us at the address or phone number below, or send an email to FCC504@fcc.gov.

To receive information on this and other FCC consumer topics through the Commission's electronic subscriber service, visit www.fcc.gov/cgb/contacts/.

This document is for consumer education purposes only and is not intended to affect any proceedings or cases involving this subject matter or related issues

Last Reviewed 03/02/12



Federal Communications Commission ■ Consumer and Governmental Affairs Bureau ■ 445 12th St., SW ■ Washington, DC 20554
1-888-CALL-FCC (1-888-225-5322) ■ TTY: 1-888-TELL-FCC (1-888-835-5322) ■ Fax: 1-866-418-0232 ■ www.fcc.gov/cgb