Consumer Advisor VoIP and 911 Service

The ability to access emergency services by dialing 911 is a vital component of public safety and emergency preparedness. Recent reports of consumers' inability to access life-saving emergency services while using Voice over Internet Protocol (VoIP) services have highlighted a critical public safety gap. The Federal Communications Commission (FCC) has taken steps to close this gap by imposing Enhanced 911 (E911) obligations on providers of "interconnected" VoIP services, i.e., VoIP services that allow users generally to receive calls from and terminate calls to the public switched telephone network (PSTN), including wireless phone networks. E911 systems automatically provide a 911 caller's call back number and, in most cases, location information to emergency service personnel.

What Is Interconnected VoIP Service?

Interconnected VoIP service allows you to make and receive calls to and from traditional phone numbers using a high-speed (broadband) Internet connection (i.e., DSL, cable modem or broadband wireless technology). 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 broadband 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.

The Public Safety Challenges of VoIP Services

Traditional phone services have generally associated a particular phone number with a fixed address. Portable interconnected VoIP services enable consumers to take their home or business phone service almost anywhere. Because certain interconnected VoIP services can be used from virtually any broadband connection, the location of the caller cannot automatically be determined.

This portability raises a number of challenges for the emergency services community. The FCC has recently taken action to make sure that emergency calls from these VoIP services will get through to the appropriate public safety authorities, but there are certain things that consumers need to be aware of.





When you call 911 from a traditional telephone, the call in most cases is sent to emergency service providers who are responsible for helping people in a particular geographic area or community. These emergency service providers 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.

But, consumers who use interconnected VoIP telephone service have had difficulty and/or experienced problems accessing 911 services. Examples of these problems include:

- VolP service simply did not connect to 911;
- VoIP service rang to the administrative line of the public safety answering point (PSAP), which is not often staffed after hours, and is usually not staffed by trained 911 operators;
- VoIP service rang to the correct line of the PSAP, but did not automatically include the consumer's/customer's phone number and/or location information.
- Customer must provide certain information (such as location information) in order for the VoIP provider to set up 911 service, but failed to do so (some customers claimed that 911 warnings were hidden in pages of Terms and Conditions);
- Customer moved VoIP service (phone number can be used anywhere the customer has a broadband connection):
- VoIP service did not work during a power outage;
- VoIP service did not work when the broadband connection (cable modem or DSL) went down or was congested.

The FCC is working to alleviate these problems and the risks to public safety posed by interconnected VoIP services by requiring the following:

- All interconnected VoIP providers must automatically provide 911 services to all
 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 service 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 callers who dial 911. Interconnected VoIP providers must also provide one or more easy ways for all 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 subscribers, prominently and in plain language, of the circumstances under which 911 service may not be available through the interconnected VoIP service or may be in some way limited by comparison to traditional 911 service. They must distribute labels to all subscribers warning subscribers if 911 service may be limited or not available and instructing subscribers to place the labels on and/or near the equipment used in conjunction with the interconnected VoIP service.
- Interconnected VoIP service 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
 provided with 911 calls. In those areas, interconnected VoIP service providers
 must ensure that the call is routed to the appropriate public safety answering
 point.

Tips for VoIP Subscribers

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 be quickly dispatched to your location.
- Be familiar with your interconnected 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 interconnected VoIP service and its 911 limitations, if any.
- If the power is out or your broadband connection is down, be aware that your interconnected VoIP service may also be out. Consider installing a backup power supply, maintaining a traditional phone line and analog phone, or having a cellular 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.

For Further Information

For more information about interconnected VoIP and 911 or about VoIP in general, see http://www.fcc.gov/cgb/consumerfacts/voip.html or www.fcc.gov/cgb/voip911order.pdf. You can also contact the FCC's Consumer Call Center at 1-888-CALL-FCC (1-888-225-5322), or a TTY telephone call to 1-888-TELL-FCC (1-888-835-5322).

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