# Voice Over Internet Protocol (VoIP)

# FCC Consumer Facts

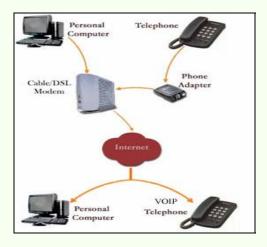
#### Background

Voice over Internet Protocol (VoIP) is a technology for communicating using "Internet protocol" instead of traditional analog systems. Some VoIP services need only a regular phone connection, while others allow you to make telephone calls using an Internet connection instead. Some VoIP services may allow you only to call other people using the same service, but others may allow you to call any telephone number - including local, long distance, wireless, and international numbers.

#### **How VoIP Works**

VoIP converts the voice signal from your telephone into a digital signal that can travel over the Internet. If you are calling a regular telephone number, the signal is then converted back at the other end. Depending on the type of VoIP service, you can make a VoIP call from a computer, a special VoIP phone, or a traditional phone with or without an adapter. In addition, new wireless "hot spots" in public locations such as airports, parks, and cafes allow you to connect to the Internet, and may enable you to use VoIP service wirelessly. If your VoIP service provider assigns you a regular telephone number, then you can receive calls from regular telephones that don't need special equipment, and most likely you'll be able to dial just as you always have.

Here is one example of how VoIP service works:



#### What Kind of Equipment Do I Need?

You may need an Internet connection, and, for many types of VoIP calls, you need a broadband Internet connection. For information on broadband Internet connections, visit www.fcc.gov/cgb/broadband.html.

Depending on the VoIP service you purchase, you may need a computer, a special VoIP telephone, or a regular telephone with an adapter. If you are calling a regular telephone number, the person you are calling does not need any special equipment, just a telephone.

#### How Do I Use My VoIP Service?

If you use a VoIP telephone or regular telephone, you place and receive calls much like you do with regular telephone service. If you use VoIP with your computer, a telephone icon usually appears on your computer screen. Clicking the icon allows you to dial numbers from a pad, or dial a call by clicking on a contact's pre-programmed name and number. You will then hear a ring just like any other call. Computer-based VoIP services have a variety of ways for notifying you that you have an incoming call.

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#### What Are Some Advantages of VoIP?

VoIP may offer features and services that are not available with more traditional telephone services. If you use VoIP, you can decide whether to pay the cost of keeping your regular telephone service. You can also use your computer and VoIP service at the same time. You can also take some VoIP services with you when you travel and use them via an Internet connection.

### Are There Special Considerations for Using VoIP?

If you're considering replacing your traditional telephone service with VoIP, be aware that:

- Some VoIP service providers may have limitations to their 911 service. For more information on VoIP and 911 services, visit the FCC's VoIP 911 Web site at <u>www.voip911.gov</u>, or see the FCC's consumer advisory at <u>www.fcc.gov/cgb/consumerfacts/voip911.h</u> <u>tml</u>.
- Some VoIP services don't work during power outages and the service provider may not offer backup power.
- VoIP providers may or may not offer directory assistance/white page listings.

These factors may change with new developments in VoIP technology. You should always check with potential VoIP service providers to confirm any limitations to their service, including 911 service.

#### With VoIP, Is There a Difference Between Making a Local Call and a Long Distance Call?

Some VoIP providers do not charge for calls to other subscribers to the service. Some VoIP providers charge for a long distance call to a number outside your calling area, similar to existing, traditional wireline telephone service. Other VoIP providers permit you to call anywhere at a flat rate for a fixed number of minutes. Your VoIP provider may permit you to select an area code for your VoIP service that is different from the area code in which you live. Calls within your VoIP area code may not be billed as long distance

## With VoIP, Is There a Difference Between Making a Local Call and a Long Distance Call? (cont'd.)

calls. People calling your VoIP area code from another area code, however, may incur long distance charges.

#### Does the FCC Regulate VoIP?

The FCC has worked to create an environment promoting competition and innovation to benefit consumers and, where necessary, has acted to ensure that VoIP providers comply with important public safety requirements and public policy goals.

For example, due to reports that some VoIP subscribers were unable to access 911 emergency services, in June 2005 the FCC imposed 911 obligations on providers of "interconnected" VoIP services – VoIP services that allow users generally to make calls to and receive calls from the regular telephone network. (You should know, however, that 911 calls using VoIP are handled differently than 911 calls using your regular telephone service. Please see the FCC's consumer advisory on VoIP and 911 services at

www.fcc.gov/cgb/consumerfacts/voip911.html for complete information on these differences.)

The FCC also limits interconnected VoIP providers' use of customer proprietary network information (CPNI) such as your telephone calling records, and requires interconnected VoIP providers to protect it from disclosure. For more information on these limits and requirements, see the FCC's consumer fact sheet at

www.fcc.gov/cgb/consumerfacts/phoneaboutyo

**<u>u.html</u>**. The FCC also requires interconnected VoIP providers to contribute to the Universal Service Fund, which supports communications services in high-cost areas and for income-eligible telephone subscribers.

Interconnected VoIP providers must comply with the Commission's Telecommunications Relay Services (TRS) requirements, including contributing to the TRS Fund used to support the provision of telecommunications services to persons with speech or hearing disabilities, and offering

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#### Does the FCC Regulate VoIP? (cont'd.)

711 abbreviated dialing for access to relay services. Interconnected VoIP providers and equipment manufacturers also must ensure that, consistent with Section 255 of the Communications Act, their services are available to and usable by individuals with disabilities, if such access is readily achievable. For more information about Section 255 requirements, see the FCC's consumer fact sheet at www.fcc.gov/cgb/consumerfacts/section255.ht ml.

Finally, the FCC now requires interconnected VoIP providers and telephone companies that obtain numbers for them to comply with Local Number Portability (LNP) rules. These rules allow telephone, and now VoIP, subscribers changing providers but remaining within the same geographic area to keep their phone numbers. VoIP providers must also contribute to funds established to share LNP and numbering administration costs among all telecommunications providers benefiting from these services. For more information about LNP requirements, see the FCC's consumer fact sheet at

www.fcc.gov/cgb/consumerfacts/numbport.ht ml.

#### Filing a Complaint with the FCC

If you have concerns about an interconnected VoIP provider's handling of your 911 calls or telephone calling records, making services available to and usable by individuals with disabilities, or porting your telephone number, first try to resolve the matter with the VoIP provider. If you can't resolve the matter directly, you can file a complaint with the FCC. You can file your complaint using the on-line complaint Form 2000 found on the FCC Web site at

<u>www.fcc.gov/cgb/complaints.html</u>. You can also file your complaint with the FCC's Consumer Center by e-mailing <u>fccinfo@fcc.gov</u>; 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:

#### Filing a Complaint with the FCC (cont'd.)

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

The best way to provide all the information needed for the FCC to process your complaint regarding any of these issues is to complete fully the on-line complaint Form 2000. The opening pages of the Form 2000 will direct you to the appropriate subpart: 2000D for complaints about handling 911 calls; 2000B for complaints about keeping your telephone calling records private; and 2000C for complaints about access for persons with disabilities. Each subpart will ask you questions specific to your complaint.

#### **For More Information**

For more information about VoIP, visit the FCC's VoIP Web page at <u>www.fcc.gov/voip/</u>. For information about other telecommunications issues, visit the FCC's Consumer & Governmental Affairs Bureau Web site at <u>www.fcc.gov/cgb</u>, or contact the FCC's Consumer Center using the information provided for filing a complaint.

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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 e-mail to <u>FCC504@fcc.gov</u>.

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

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

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