

What to know about the Internet Services

- Does the ISP offer 24/7 support?
- Does the ISP continually monitor the network link and call the user if/ when it goes down?
- Does the ISP offer toll free support calls? Do they have adequate staff on their support lines?
- Does the ISP have 24-hour access to each hub location with service people available to fix problems?

d. Connectivity and bandwidth

- How much bandwidth does the ISP offer (64 Kbps, 128 Kbps, 256 Kbps)?
- How much bandwidth is shared with others?
- Is a dedicated line service offered and if not how many users are there per modem and phone line?
- How direct is the Internet connectivity? Are there direct connections to the Internet backbone and if not - how many links are there between the ISP and the backbone?

e. The price of the Internet services

- What services are offered for a standard price? What and how much are the extra services offered?
- What is the cost of a Website? What storage and transmission volume is offered per month?
- What is the price of mailing lists and newsgroups?
- How are the forms, databases and other programming accommodated?
- Are auto response mailers available? Does the service support Real Audio, streaming, VRML, Java, Active-X, and other leading edge technologies?
- Are there website management options (front page extensions and traffic statistics)?
- Are design and programming services and support offered?

f. Contracts and accountability

- Is there a standard contract or can it be tailored to suit the user?
- Is the ISP accountable and reliable for network related problems that affect the user's site?

Free Internet Access

Consumers are advised that any offer of 'free Internet access' should be examined in detail since research reveals that many users find it unsatisfactory. Consumers should also note that some companies offer a free service ONLY for a brief introductory period.

Prepaid Internet Services

Some companies offer prepaid services as part of the purchase of a computer (the contract is usually 1-3 years). Such contracts can, however, prove difficult to cancel and may not offer real financial advantage.

Internet Security

Connection to the Internet puts the user at risk of infections by viruses and other forms of 'attack'. Such risk is increased if the connection is continuous. Most ISPs offer personal firewalls and virus protection software to guard against these attacks. Both must be updated regularly.

Making a Complaint against an ISP

Most ISPs wish to resolve complaints swiftly and amicably. Should this prove not to be the case, the user is advised to take their complaint to the Communications Authority of Kenya (in writing and with all supporting documentation).

To file a complaint against an Internet Service Provider, users are advised to contact to the Director General of the Communications Authority of Kenya at (www.ca.co.ke)

Need to know more?

For further information on the above topic or any other aspect of health and safety with regard to communication equipment, please contact:

Disclaimer: While every attempt has been made to ensure that the information included in this document is accurate, it is intended ONLY as a guideline towards the safe operation of communication equipment and should not be regarded as (or used in lieu of) legal advice. The Communications Authority of Kenya will not, therefore, accept any liability for the consequences of any actions taken, or decisions made upon the information offered.

Acknowledgements: This brochure was developed as part of the Consumer Education Outreach Programme of the Communications Authority of Kenya, working in partnership with Teknobyte (Kenya).

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CA/CPA/CEP/B/19/2014

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HATUA**
Pata huduma ya
mawasiliano unayostahili

 **COMMUNICATIONS
AUTHORITY OF KENYA**

Introduction

The Internet has become an important part of life for many people in Kenya and it is expected that Internet usage will increase significantly in the coming years.

What is the Internet?

The Internet is a worldwide publicly accessible series of interconnected computer networks, which allow users to access resources and information within the network. Essentially, the Internet is a loose confederation of autonomous databases and networks, which was originally developed for academic use, but which now offers a global infrastructure of millions of sites, which are accessible by anyone.

The internet offers wide range of services higher transmission speeds and improved video quality are opening the world to countless possibilities.

Who is an Internet Service Provider (ISP)?

An Internet Service Provider (ISP) is a company that provides a connection to the Internet alongside a range of Internet services, such as Email, Ecommerce, E-learning and access to the World Wide Web.

Speeds of Connection

Information is sent and received via the Internet at various speeds.

These are measured in bits per second (bps), kilobits per second(Kbps) and megabits per second (Mbps)

Methods of Connecting to the Internet

There are many ways of connecting to the Internet, such as:

1. Via dial-up Internet Access

Dial-up Internet access allows access to the Internet via a conventional telephone line and a modem. It is of use to those who travel and require an easily available cost-effective service for the transmission of small quantities of data. Once the Internet is accessed, the phone line is no longer available to make or receive calls. The dial-up connection speed for a standard 56k modem can theoretically transfer 56 Kilobits of data a second. To put this into perspective – the average web page (with images) is around 50 Kilobits, so to transfer such a page would take around 7 seconds. Since some Internet Service Providers charge by the minute for a connection – this can have financial impact.

Advantages of dial-up connection

Dial-up connections can be economical and are widely available; they use a standard modem, thus hardware costs are minimal.

Disadvantages of dial-up connection

Dial-up connections are very slow. When connected to the internet the same phone line cannot be used for phone calls.

2. Via Digital Leased Line Circuit

A digital leased line circuit is a permanent connection (using cable/ fibre or wireless connection) between two locations typically available at speeds of 64k, 128k, 256k, 512k, 1Mb/s, 2Mb/s. A high-speed solution, it is the best suited for the use of those requiring high-performance and full-time dedicated access. Most providers offer tariffs for leased lines (Local Loop Fees).

3. Via an Integrated Services Digital Network (ISDN)

The ISDN offers a digital telephone connection to the ISP at speeds between 64 and 128 Kbps. Faster than the dial-up service, ISDN is significantly more expensive and requires a special modem, ISDN makes use of the conventional telephone line thus allowing the user to make calls and use the Internet simultaneously.

4. Via Digital Subscriber Line (DSL)

The DSL service is an ultra-high-speed Internet connection, which also requires a special modem and uses the regular telephone line while allowing simultaneous internet and telephone use. DSL represents a continuous connection to the Internet: it is always in operation and no dial-up is required. A variation of DSL, the Asynchronous Digital Subscriber Line (ADSL) offers faster speeds for downloading (up to 1.5 Mbps) than for uploading (128-284 Kbps).

5. Via Cable Internet Service

Some cable television companies provide an Internet connection service, which utilises their cables to deliver a fast, continuous connection (connection speeds range from 500 Kbps to more than 1Mbps). The speed of download in relation to cable Internet connections is, however, often faster than the speed of data transmission. Such services are normally offered for a monthly subscription fee (plus an initial fee for the cable modem), and may be cheaper if the consumer is already a client of the cable company in question.

Advantages of cable connections

Cable Internet connection offers high-speed download of large files (music or large attachments). Cable connections transfer data digitally, eliminating any digital/analogue conversion overhead. Cable connections are continually connected – so there is no wait to make a connection.

Disadvantages of cable connections

Cable connections are not available in every neighbourhood. Cable connections are continually connected so firewalls and other security devices are required to protect the computer.

6. Via Wireless Service

A number of devices allow for connection to the internet without the use of a wired computer connection, and thus allow access from any venue. Wireless download speeds are relatively slow, though great strides are being made in the relevant technology. Wireless services include: iBurst, WiMax, EDGE and GPRS.

Additional Internet Services

A number of additional Internet services are offered, such as:

- i. **Instant Messaging Services (IMS):** Instant messaging services allow users to contact each other directly and more immediately than regular email. They are generally only available to subscribers to the same service.
- ii. **Subscriber-only Chat Rooms:** Chat rooms are online sites where users with similar interests can come together, talk, and communicate with people all over the world. Some ISPs offer online community chat rooms, which are available for use only by subscribers to the same network.
- iii. **Web Pages:** Most ISPs offer to set up web pages at no additional cost (though additional pages are charged separately). The ISPs also often offer Web publishing software so as to make the creation of pages easier.
- iv. **Anti-Spam Services:** 'Spam' is unsolicited mass email, which is usually sales-oriented. Many ISPs offer filters, which can be configured by the user so as to prevent 'spam' from entering their mailbox.
- v. **Family Accounts:** Some ISPs offer family accounts, which offer additional email boxes and child-protection software. Such accounts allow a number of people in the same household to access the Internet via the same account.

How to Choose an Internet Service Provider (ISP)

The considerations regarding the choice of an ISP include:

a. The degree of access required

This is determined by whether or not the user intends to make frequent use of the Internet, whether they travel, whether they require dedicated access (for many users in one location) or whether they will require to make many or large file transfers.

b. The track-record of the ISP

- What is the ISP's history with the Internet?
- How many years' of experience do they have in TCP/IP networking?
- Do they have experience with all aspects of the Internet, such as; network administration, e-mail, ftp, telnet, mailing lists, gopher and programming.

c. The customer service offered by the ISP

- Does the ISP have a strong focus on the customer service?
- Does the ISP understand the access and security requirements of the client?