

CHAIRPERSON' 2014/15 MESSAGE TO STAKEHOLDERS

In implementing the national broadband policy, the Authority will have to deal with:

Network Neutrality

Network Neutrality...” is the principle that all electronic communications passing through a network is treated equally...[meaning] all communication traffic treated independent of content, application, service, device, sender or receiver address”. (ITU 2013:16)

This means that all “end users are able to access content, application and services of their choice at the same level of quality, Internet speed and price, with no priority or degradation based on the type of content, applications or services”

Net neutrality has to do with the management of traffic on the internet between various and multiple end users and Internet Service Providers, and sometimes involving Content and Application Providers. Surfing the internet, downloading and accessing content is affected by a quality of service, and the management of traffic can affect quality of service in terms of speed of downloading documents, etc.

In order to provide internet service to end user, ISP have to manage traffic on their sites to avoid congestion and provide the best quality of service; to examine the type of data traffic being delivered and detect user patterns among customers. They also use deep packet inspections (DPI) to identify viruses, spam and other harmful applications; what kind of content end users are interested in ; which are the popular websites for online gambling, video streaming or Skype. (ITU 2013:16).

In managing data traffic, ISP have to direct speeds and bandwidth to different types of applications, for example by making video streaming faster than other data applications such as file sharing.

Traffic management is therefore involves the delay of certain types of Internet protocol packets and the prioritization of others, to enable the ISP to allocate available network resources and attain or guarantee optimum performance for diverse classes or users across the network.

Although traffic management is critical in the provision of internet services to end users, it is open to abuse by the Internet Service Providers, resulting in unfair access or use of the internet.

The rationale for managing internet traffic is to :

- Ensure and provide network security, thereby protect both network and end users from malicious intent
- Prevent clogging, whereby a small number of customers

Concern about possible discriminatory practices by ISPs emanating from the fact that with technological convergence, ISP and Content Application providers increasingly cross into each other’s markets. CAPs are now able to offer VOIP services, thereby coming to compete with the ISPs. Conversely, ISPs have also come to provide Internet Protocol Television services .

ISP play a middle-man role between CAP and end users, neither can reach the other except through an ISP. ISP with Significant Market Power can limit competition by blocking and throttling of the competitive service in favour of its products or those of its group or subsidiaries. (ITU 2013: 17).

When an ISP pre-determines the rate of throughput based on data type, that constitutes a contravention of the principle of net neutrality or equal treatment of data. Differentiating data is open to abuse and discriminatory practices by ISPs.

The main challenge for regulators is that it is very difficult to distinguish between “reasonable” traffic management and “unfair” measures that justify regulatory intervention.

Some of the traffic management techniques include:

- Data Caps

To use broadband to achieve universal service :