

**Statement from the
Trinidad and Tobago Computer Society, Internet Society Trinidad and Tobago Chapter & IEEE Trinidad and Tobago Section
on Digicel Trinidad and Tobago's ban on VOIP Services**

Summary of Issue

On the 5th July, 2014, Digicel (Trinidad and Tobago) announced that it will be blocking access to Voice over IP (VoIP) applications it considers to be 'unlicensed' or "unauthorized" on its "4G" service. [The Trinidad and Tobago Computer Society \(TTCS\)](#), the [Internet Society Trinidad and Tobago Chapter \(ISOC-TT\)](#) and the [IEEE Trinidad and Tobago Section \(IEEE-TT\)](#) consider this to be a grave error, and wish to make a public statement on this matter, both from a technical perspective and a social one.

Our position

It is the position of the TTCS, ISOC-TT and IEEE-TT that this move is a violation of the concept of "Network Neutrality" as defined by Wu¹. We are of the firm belief that this move puts us, as Internet users, on a slippery slope, as it may well pave the way for the banning of other important Internet services for learning, innovation and productivity which use much more bandwidth.

Given that customers are paying for Internet data service, it is not accurate for Digicel to state that VoIP services amount to "illegal bypass activity". Digicel is effectively asking that both consumers and suppliers pay for the same service.

While we understand the need to ensure the integrity of their service, from a technical perspective, there is no reason to single out VoIP connections as a large consumer of bandwidth that can reduce the Quality of Service enjoyed by other customers as the throughput for a VoIP connection is very small (on the order of 20kbps)². Compared to services such as YouTube, Netflix or even browsing media-rich web pages (on the order of hundreds of kbps)³, throughput required by VoIP applications is negligible. Therefore, the argument that services such as VoIP has a significant impact on other data services is inaccurate (unless the number of VoIP users is orders of magnitude greater than the number of non-VoIP users).

The reasoning given by Digicel TT for the move that "VOIP services (are) putting enormous pressures on bandwidth – and customers' data usage experience (is) being negatively impacted" is also misleading since it is not technically possible for Digicel to give priority to VoIP traffic on their current data network. In their current system, VoIP traffic is treated just as any other data service.

We can only conclude, therefore, that the reason for the proposed ban is to stop the loss of revenue from traditional circuit switched voice services rather than any move to protect the integrity of its data service to customers.

It is important that Internet service providers are committed to the concept of Network Neutrality in Trinidad and Tobago so as to encourage innovation and avoid the potential of censorship. Digicel should certainly backtrack on this move, in the interest of national development. The [Telecommunications Authority of Trinidad and Tobago \(TATT\)](#) should engage all stakeholders in a broader discussion with respect to how we should move forward on the issue of Network Neutrality. TATT should also strive towards making a more competitive environment by accelerating the introduction of a 3rd service provider as well as accelerate the long promised implementation of Number Portability to promote the competitiveness in the telecommunications space that would prevent similar anti-consumer, anti-innovation and anti-economic growth policies.

¹ Tim Wu, *Network Neutrality FAQ* : http://timwu.org/network_neutrality.html Retrieved on July 8th, 2014

² P. Hosein, "[Capacity of Packetized Voice Services over Time-Shared Wireless Packet Data Channels](#)", *IEEE INFOCOM, Miami, Florida, March, 2005*.

³ P. Hosein, "[Pricing for QoS-Based Wireless Data Services and its Impact on Radio Resource Management](#)", *IEEE Management of Emerging Networks and Services Workshop (Globecom), Miami, FL, Dec. 2010*.