

**Response to
Discussion Paper on
Policy Recommendation on
Internet Neutrality**

Initial Comments

**Response from
Columbus Communications Grenada Limited**

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INTRODUCTION

Columbus Communications Grenada Limited (CCGL) welcomes the opportunity to comment on the Policy Recommendation on Internet Neutrality Discussion Paper put out by The Eastern Caribbean Telecommunications Authority (ECTEL). We consider this consultation to be very timely and relevant based on current market complexities and issues. However we do not believe that in its current form the discussion paper addresses the issue of network neutrality comprehensively, but rather focuses narrowly on the network management technique of Deep Packet Inspection (DPI)

CCGL reserves its' right to comment in more detail as a more comprehensive policy on internet neutrality is formulated.

Context of Network Neutrality

The issue of network neutrality came to the forefront against the background of technology convergence. Specifically, the concept is largely motivated by the open network concept and collaborative nature on which the internet was developed. There is no one agreed definition for net neutrality, however the principle is that all electronic communication passing through an electronic communication network should be treated equally. In other words, Internet Service providers should not prioritize one form of traffic over the other, or discriminate against different types of content and or applications. Aggressive proponents of net neutrality such as the United States see this as a way to guarantee a level playing field for all web sites, internet technologies and content providers.

Requirements for neutral treatment of traffic have implications for network management. Because of this implication, some view network neutrality as a network management issue. From a traditional telecommunications network perspective, network neutrality policy has implications for the efficient development and management of networks, as well as the cost of services to end users. As convergence deepens, and technologies like cable, satellite transmission, telephone and data transfer services converge and services become more complex the implications for a net neutrality policy will be magnified.

To continue to provide quality service to a wide cross section of users, internet service providers will have to ensure efficient investment and management of networks. This should include the use of new business models to ensure for instance that new service providers, for example, content providers contribute to the development of broadband infrastructure. This is of particular importance in Caribbean economies, where there is still a need to extend network reach.

With all the concerns and developments mentioned above, CCGL does not think that network neutrality is a simple network design principle and it should be looked at from an unbiased perspective taking account of the viewpoint and interests end users, service providers and other stakeholders.

Existing Legal and Regulatory Framework in ECTEL States

The current regulatory framework is based on the traditional telecommunications market environment, with functional differences between infrastructure and services. This difference is manifested in 1) a licensing framework that is technology and service based, 2) different approaches to regulating carriage services, telecommunications and broadcasting services for example.

Efforts to move towards a converged legal and regulatory regime commenced with work to update the current Telecommunications Acts in ECTEL states, to broaden the scope to reflect the converged market place. The proposed Electronic Communication Bill is supposed to replace the Telecommunications Act in the various ECTEL countries. The naming of the instrument reflects a move away from the now narrow focus on traditional telecommunications networks and services to reflect convergence. Proposed changes to address the convergence agenda include;

- 1) Replacing the concept of public telecommunications networks with electronic communications network. Electronic communications network covers a wider range of transmission systems, including the internet which has become the conduit for most converged services including telephony.
- 2) Referencing electronic communications services as opposed to one specific telecommunications service, such as public voice telephony services as in the existing regime.
- 3) Updating authorization framework to allow for a more flexible regime to cover several services as opposed a service specific regime.
- 4) Ensuring a level playing field for all service providers providing video to the public for a fee irrespective of the method of delivery.

CCGL believes that updating the legal and regulatory framework is the first step towards comprehensively addressing other convergence issues such as network neutrality. CCGL is therefore requesting that ECTEL updates the industry on the status of these planned changes.

Approaches to Internet Neutrality

In discussing "Approaches to Internet Neutrality" we note that ECTEL has reviewed the approaches to net neutrality in a number of markets, specifically in the European Union (EU) and the United States. ECTEL addressed a range of issues; 1) prohibit the blocking of content, 2) refine quality of service standards, 3) improve on information transparency and 4) promoting competition in retail and broadband markets. We will address these issues in response to ECTEL's specific proposals. However, it is important to point out that the jurisdictions referenced operate within the context of fully converged legal and regulatory frameworks. This goes to the question raised in the preceding section, that is, there is a need to update the legal and regulatory framework in the ECTEL markets in order to develop comprehensive, fair and sustainable policies on net neutrality.

CCGL is of the opinion that ECTEL should adopt a more streamlined and holistic approach to convergence and related issues such as Internet neutrality. This involves ensuring the legislative and regulatory approach is designed to appropriately respond to convergence issues including net neutrality.

COMMENTS ON ECTEL'S PROPOSED APPROACH TO INTERNET NEUTRALITY

1. The blocking of websites and throttling speeds stymie growth and development of the ICT Sector

Response:

ECTEL suggests that the blocking of content and the use of network management tools such as throttling could have the impact of curtailing the achievement of the Government's objective to establish a knowledge based society.

CCGL whole heartedly supports the Government's objective to establish knowledge based societies. We understand that social and economic development in this era is fuelled by access to affordable broadband services and the appropriate use of the technology to promote economic growth. It is with this conviction that we believe that appropriate and overarching industry policies that are consistent with technology and market trends, that support continued investments in the sector, and ensure a level playing field for all network operators and service providers are key building blocks in attaining the goal of a knowledge based society.

The policy recommendations provided in the Internet Neutrality Discussion Paper, do not address any of the key building blocks (creating and enabling legal and regulatory environment, network development and development of skills and awareness) for the development of the sector and the wider economy. It is focused almost exclusively on addressing the network management dimension of net neutrality, and specifically on the use of one network management technique, Deep Packet Inspection (DPI).

It is our considered view that policies to support the development of the information society should address the major building blocks required to promote this development. Without this larger view, policies focused on preventing the use of DPI could run counter to the objective of the development of the information society. From a network providers perspective, in a converged network environment DPI enables more effective and efficient management of overall traffic throughput, to ensure that the usage pattern of a few users will not result in reduced broadband speeds to the average broadband user, and at higher prices. On the contrary, ECTEL's approach could serve to protect a few at the expense of the many.

2. Content Blocking Breaches Current Telecommunications Legislation and Terms of Conditions of Licences

Response

In supporting the above claim ECTEL cites various sections of the Act and clauses from relevant licences. Reference is made to confidentiality of information and privacy, and specifically to the section of the Act dealing with confidentiality. ECTEL quotes as follows;

"Any message transmitted over a public telecommunications network, shall be confidential and shall not be intercepted or interrupted without the consent of the sender, or without a court order made under this Act or any other enactment"

This quoted section deals with unlawful intercept. We believe this is a totally separate issue. It is meant to address actual interception of communication, that is intercepting and listening to telephone calls. DPI is a technique that examines data path and packet headers where relevant based on established criteria, and does not interrogate the actual content (payload) of the data packets. It is an automatic process used to address issues such as viruses, spam and other intrusions as well as managing traffic congestion. With DPI, one is not discovering or divulging the content of the message (usernames, passwords, text or skype messages etc), but simply using an automated process to determine the type of message being transmitted, in order to manage network congestion and possible abuse. As

such, we do not believe the section referenced is relevant in this context. Notably, the section referenced is reflective of the traditional voice telephony network environment on which the current Act is based.

The privacy and confidentiality clause referenced (Article 8 of Part 2 of the PMT and ISP Licences) relates to information shared in the process of doing business. This is clearly not in reference to internal business processes such as network management. Further as noted above, once the traffic management rules have been defined, DPI is an automated process, there is no human intervention.

Reference is also made to Articles 6.3 and 6.5 of Licence for the Installation and Operation of an Internet Network and Provision of Internet Services. These clauses relate to non discrimination and fair trading issues generally. Section 6.5 is subsidiary to Section 6.4 which deals specifically with unfairly preventing or restricting competition " in any market for licensed services." This is clearly with reference to competition between licensed providers.

In addressing the legality of DPI, ECTEL does not address relevant considerations such as individuals using the network to illegally download content which is subject to copyright protection. The transmission of illegal and malicious content on the Internet is a pervasive problem in the society today. In formulating a net neutrality policy, consideration should be given to relevant and current market issues. Another relevant issue that we believe any policy on net neutrality should address, and specifically so in the Caribbean context is how to accommodate over the top content providers (who use large amounts of bandwidth), in a way that ensures that the cost of providing that bandwidth is covered by either the service provider or users of that bandwidth. This is critical to ensuring that the long term viability of networks. Network development to support development of the information economy requires an enabling environment that encourages investment in network infrastructure, encourages development of new services and applications and ensures that broadband offerings are affordable for the average user.

3. Fixed and mobile broadband providers should refrain from practice of DPI and blocking customer access to content irrespective of device used

Response:

ECTEL position is premised on the notion that DPI breaches legislative provisions including individual privacy rights. In the preceding section we addressed the legislative provisions cited by ECTEL and we do not agree that the specific clauses cited support ECTEL's conclusion.

Traffic management tools such as network monitoring, capacity reallocation, caching and traffic shaping are necessary to ensure the proper and efficient functioning of networks. This is particularly necessary in the internet environment to manage network congestion, ensure users comply with agreed terms and conditions, ensure reasonable quality of service to all customers and ensure the service is affordable. It is our considered view that the reasonable use of DPI as well as other traffic management tools enhances overall quality of service thus benefits consumers.

It must be noted that this should be done within a reasonable and effectively developed framework specifically geared towards the Caribbean market. In formulating a policy position ECTEL must find a middle ground that balances the interests and rights users, network operators, service providers and other stakeholders.

4. Providers must demonstrate to the Satisfaction of the Regulator that Traffic Management Techniques Do Not Unduly Interfere with Individual Right to Privacy or is Discriminatory

Response:

ECTEL's position recognizes the need for network management. Consistent with business practices in all business transactions with customers there should be clear policies that addresses issues such as privacy rights and discriminatory practices.

We believe that the starting point for the development of such policies and practises would be the implementation of a legal and regulatory framework that supports convergence. The approaches used in mature jurisdictions offer some solutions that should be considered. Where necessary such approaches should be tailored to meet the specific needs of Caribbean economies.

In the common European Framework and specifically in the United Kingdom (UK) net neutrality is addressed using a light touch regulatory approach which is a combination of standard regulatory ex-post tools for significant market power and discriminatory practises, plus an industry self regulatory approach based on minimum quality of service standards set by the industry, and accompanied by reporting requirements. We would support further exploration of this approach. This is because our legal and regulatory framework is patterned off the UK framework. In the US internet related services are not regulated as telecommunications services but as information services, as such the UK regime may be more relevant to the context for . ECTEL countries.

We believe that privacy rights could be addressed as part of rules relating to consumer rights and obligations. Such rules should address the kind of information on terms and conditions

of broadband services that should be made available to customers. It should also address the responsibilities of users with respect to issues of piracy (downloading content illegally).

5. ECTEL recommends that providers utilize usage based pricing schemes and application agnostic network management as a method to control network congestion

Response

Tiered pricing schemes based on bandwidth usage are premised on the principle of paying for what you use. This pricing method is valid, but we believe that decisions on commercial pricing strategies should not be looked at in isolation but as part of the wider economic and market objectives. Given that the end user market is competitive, pricing decisions should not be regulated but left to the dictates of the market. In instances where there is market failure, competition rules could be used to address these issues. Service providers also have more information on their customer needs and usage patterns and are therefore best placed to make decisions that ensure cost efficiency as well as maximizing user value.

Further we note ECTEL's position that they support usage based pricing schemes where for example a customer is charged for exceeding usage limits, but do not support cutting internet speeds once a customer exceeds agreed usage limits. CCGL believes that such practices may be necessary as a method of managing the spend of a customer, as well as minimizing bad debt risks on the side of the service provider. In the traditional telephony space, providers do impose high usage credit limits of customers to manage situations where customers may not be able to settle their bills. In the broadband internet space, some form of network management will also need to be implemented to protect both the customer and the service provider. Network management techniques including DPI permits operators to play a similar role in the provision of Internet services.

On the question of the application agnostic network management methods, while this can be adopted, it does not take into account that different applications consume network bandwidth differently. It is equivalent to saying that a customer that has reach his high spend limit should be banned from making and receiving all calls, rather than selective barring such as suspending international and mobile calls, but allowing inbound and local outgoing fixed line and on-net calls. It would be far more effective and advantageous to the consumer if the traffic for abusive malware is throttled, while the customer continues to be able to browse and check his email in the event the customer has reached or surpassed his usage limit.

6. ECTEL recommends service providers provide customers with clear, readily accessible and relevant information on the traffic management practices, the quality of service that they should

expect, and all other terms and conditions relating to their broadband service.

Response:

CCGL supports measures to provide customers with information, in this case clear terms and conditions for their broadband service.

7. ECTEL requires information on traffic management techniques used by ISPs.

CCGL uses various tools and techniques to manage its network, deliver the service, and ensure compliance with our Subscriber Agreement and related usage policies. These tools and techniques are dynamic, like the network and its usage, and can and do change frequently. For example, these network management activities may include (i) identifying spam and preventing its delivery to customer e-mail accounts, (ii) detecting malicious Internet traffic and preventing the distribution of viruses or other harmful code or content, (iii) lowering the priority of traffic for users who are the top contributors to current network congestion, and (iv) using other tools and techniques that may be required in order to meet its goal of delivering the best possible broadband Internet experience to all of its customers.

8. ECTEL requires information on whether ISPs would support the introduction of regulations by parliament to control the use of DPI and similar technologies.

Response:

CCGL would not support the introduction of legislation or specific regulations with respect to the use of DPI and other similar technologies used for traffic management purposes. Traffic management is a necessary element of providing a quality of service as mentioned elsewhere in this response. Just as fixed line and mobile networks apply busy tone treatment (even when the end line is not in use), fraud monitoring/detection, and credit limits on telephone users to avoid/manage network congestion, broadband providers do need to manage network traffic on their network is appropriately managed. This is imperative to ensure efficient and optimum performance levels. This redounds to the benefit of customers

with the increased delivery of faster broadband services at lower prices. We believe the wider issue, around which industry driven policies should be developed is net neutrality and not network management techniques.

Concluding Comments:

The consultation is entitled Internet Neutrality Discussion Paper, however we do not believe that it addresses the issue of network neutrality comprehensively, but rather focuses narrowly on the network management technique of Deep Packet Inspection. CCGL recommends that the discussions should be widened to address the issue of net neutrality comprehensively.

CCGL thanks ECTEL and the NTRC for the opportunity to participate in this consultation. Kindly direct any communication in relation to this response to:

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