



Cooperative Republic of Guyana
OFFICE OF THE PRIME MINISTER

6th April, 2022.

Ms. Dela Britton
Chairman
Public Utilities Commission
106 New Garden Street,
Queenstown, Georgetown.

Dear Ms. Britton,

Quality of Service

The Government of Guyana is extremely concerned at numerous reports of poor quality of public telecommunications services, especially with respect to fixed and mobile broadband Internet services. I am advised that institution of appropriate technical Quality of Service Standards is a necessary part of the solution to this issue.

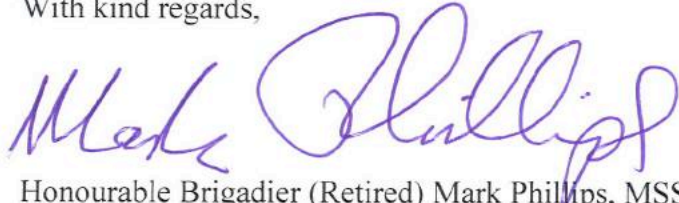
I therefore request that the Commission examines the Telecommunications (Consumer Protection) Regulations 2020 with a view to amending Schedules 1 and 2 to include at a minimum the following Quality of Service Parameters with appropriate definitions and standards.

Fixed and Mobile Broadband Quality of Service Parameters

1. Availability
2. Packet Loss Ratio (Upload and Download)
3. Average Throughput for Packet data
4. Latency
5. Jitter

I shall be following up on the procedural requirements for effecting the amendments in the near future.

With kind regards,



Honourable Brigadier (Retired) Mark Phillips, MSS, MP.

Prime Minister of the Cooperative Republic of Guyana



Attached: Explanatory notes to accompany Quality of Service Parameters

Explanatory Notes to Accompany QoS Parameters

	Parameter	Description	Manifestation to the User
1	Availability	This is a measure of how much time the service is actually working. An analogy would be blackouts in the electrical system. A blackout of 2.4 hours is represents 10% unavailability in a 24hr period or 90% availability. There are similar measures for telecommunications systems.	Service outage discernible to the user. Inability to place calls, dropped calls (at the onset of outage)
2	Packet Loss Ratio	Data is transmitted in packets. A message say 1MB in size might be broken up into 1000 packets each of which is transmitted separately and reassembled at the far end. The underlying telecommunications network may have faults such that some of the packets are lost or otherwise compromised. This will require re-sending either the packets or the entire message (dependent on the packet transport mechanism used).	Slow connections, (waiting for retransmission), dropped calls, buffering
3	Average throughput for Packet Data	Throughput is essentially speed. This will force operators to pay attention to their network design and subscription levels.	Slow connections, dropped calls, buffering.
4	Latency	This is the delay between sending a packet of data and its being received at the far end.	Discernable delay between person speaking and other party hearing on voice and video calls. One party may perceive silence and start to speak, at which time the delayed speech of the other party becomes audible.
5	Jitter	This is the variation in delay.	For one-way video feeds in particular, a standard delay is tolerable, since it only manifests in a delay in the start of a feed but once started the video plays and is experienced by the user normally. Where however the delay

			is variable (jitter) then video is jerky, freezes, stops and starts etc.