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Date: 3 October 2016

Subject: On low power modes for fibre backhaul for FTTdp

The BBF requirements for FTTdp with reverse powering include support for low power operation when supporting life-line services reliant on small batteries in the customer's premises. We have identified the requirement for low power modes for optical backhaul that can support data rates limited to about 256 kbit/s per customer (with the goal of supporting a VoIP call for 2 hours) and limited to about one packet per second (with the goal of supporting keep alive traffic for 48 hours). Such mode or modes should have dynamic behaviour consistent with the operation of G.fast low power link states, and should provide power savings of at least a factor of 10. We invite your comments on how these requirements can be met.

This requirement applies to both PON and P2P Ethernet technologies.

We believe that currently specified low power mode definitions for PONs do not seem to operate quickly enough to synchronise with G.fast link state changes.

It has been suggested that for P2P Ethernet, the EEE protocol might provide the basis for a solution, though it is noted that the protocol would need to be extended for optical applications. However, further protocol development might be necessary to link EEE operation to traffic monitoring implemented to drive G.fast link-state transitions.

Sincerely,

Michael Fargano,
Broadband Forum Technical Committee Chair

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Date of Upcoming Broadband Forum Meetings

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