

Notes from 10/19/21

- ❑ Is there a power-saving mode in ITU-T PON standards.
 - Review ITU-T spec.
 - Do ITU-T PON operators enable power saving modes.
- ❑ If ONUs are already under the required consumption limits, do we need any extra mechanisms?
- ❑ Vendors don't implement hooks that enable operators to enable power saving modes.
- ❑ Are there any specifications for power consumptions (CableLabs, others?)
- ❑ EU CoC document

Missing features

- ❑ ONU should report its current power consumption
 - Instantaneous, average?
 - Attribute to report power
 - Attribute to configure averaging window
 - Attribute is valid only under ONU context
 - Sample before the power supply
 - Make power measuring circuitry optional. Vendors should be interested in implementing it.

Notes from 5/3/21

- ❑ For enterprise customers, SLA is highest priority. Power saving is not used because it affects SLA.

- ❑ Power savings should focus on Residential market
- ❑ PS for OLT shelf
 - Uplink port will never go to sleep (telemetry)

- ❑ In the OLT shelf, power consumption by the OLT SoC and optics is much smaller than the backplane and uplink switch.

- ❑ PS control – periodic vs. one-time command.
- ❑ ONU should be able to decide what blocks to shut down, for how long, and when to wake up.

- ❑ How much power the RX path in optical module consumes compared to TX?

Answers we need

- ❑ Real ONU power measurements by CL (Curtis)
- ❑ Check what power saving modes are used in GPON/XGS-PON (Curtis)
- ❑ Review EU CoC for Power Consumption (all)
- ❑ Hardware impact of supporting the power level attribute (Glen)
- ❑ ONU vendors view on power savings (Mike)
- ❑ High level power-saving protocol without cyclic control by OLT (Glen)