P802.1Qbu status

- We have a Draft 0.0, prepared by editor Tony Jeffree.
- Our baseline architecture for using P802.3br is:

![Diagram of transmission selection with gates]

**Figure 8-12—Transmission selection with gates**
P802.1Qbu architecture

- Up to 8 queues.
- Some are controlled by credits, some are simple queues.
- One “Transmission selector” that picks among all of the queues that are presenting “I have a frame ready for transmission” according to rules that include priority and round-robin weights.

- **New** for P802.1Qbv “time-based shaper”: A row of “transmission gates” between the queues and the transmission selector that are controlled by a repeated time-based schedule.

- **New for P802.1Qbu “frame preemption”**: A given queue is configured to be either preempting or preemptable.
P802.1Qbu uses envisioned by TSN (1)

- **Given**: I want to transmit a preempting frame at or shortly after time T1.
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- **Given**: I want to transmit a preempting frame at or shortly after time T1.
- I must not start transmitting a lower-priority frame just before T1, or I will delay the transmission of the Pri 6 frame.
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Preemption reduces the size of the delay.
P802.1Qbu uses envisioned by TSN (2)

- Preemption allows me to get some amount of useful bandwidth, even if my scheduled traffic takes up most of my bandwidth, leaving relatively small windows for the best-effort traffic.

- Preemption means that time-scheduled transmissions impose no additional restrictions on the length of preemptable frames.
Thank you.