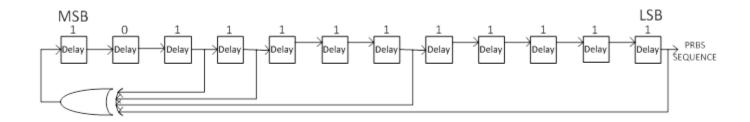
Upstream Probe Sequence for 802.3bn

Leo Montreuil, Broadcom

Upstream Probe Sequence (1 of 2)

- DOCSIS 3.1, section 7.4.16.3:
 - PRBS sequence $X^{12} + X^9 + X^8 + X^5 + 1$
 - Seed = 3071 d (BFF h)
- Recommend for 802.3bn (section 102.4.3.3):
 - Use the D3.1 sequence, seed and framing
 - 2 symbols (repeat symbol twice) using all nonexcluded subcarriers
 - Seed = BFF h
 - Should we support skipping/staggering probe pattern?
 - No. There is no advantage at using staggered probe in EPoC.

Upstream Probe Sequence (2 of 2)



Sequence of length 4096 is:

Sequence is mapped to BPSK:

```
0 mapped to a BPSK pilot of +1 1 mapped to a BPSK pilot of -1
```

Proposed Motion

 Adopt and incorporate in the draft the Upstream Probe Sequence recommendation on pages 2 and 3 of montreuil_3bn_02a_0514.pdf without staggering.

- Moved:
- Seconded: