Maintenance Item 0270: Missing transmission selection algorithm configuration management

(https://www.802-1.org/items/385)

Paul Congdon – 9/28/2020

Issue: YANG parameters to determine or configure the transmission selection algorithm of traffic classes in bridge ports are missing (cmp. IEEE Std 802.1Q-2018, table 8-6). As a result, it is not possible to:

a) Identify the transmission selection algorithms assigned to classes:

1) If recommendations of clause 34 in IEEE Std 802.1Q-2018 are implemented (or not)

2) In presence vendor-specific algorithms

b) Compute gate event list schedules and similar based on the identified assignments

c) Change the transmission selection algorithm of a class, if supported via management

Proposed Changes:

1. Add identities and grouping to ieee802-dot1q-types.yang (see attached file).

2. Add leaf to ieee802-bridge.yang (see attached file - What about pb, tpmr and other bridge types?)

3. Update the tree listing in "48.6.2 YANG data scheme definition for ieee802-dot1q-bridge YANG module" to include the new attribute (see attached file – what about other bridge types?)

3. Update Figure 48-5 UML diagram to include the new attribute as part of the 'port'. Just after the traffic-class-table include the following: What about other bridge type UML?

struct transmission-selection-table; // (12.20.2, 8.6.8) r-w

4. Update the security sections in "48.2.1 Security considerations of the ieee802-dot1q-bridge and ieee802-dot1q-vlan-bridge YANG modules" to add the following to the unnumbered list just after the interfaces/interface/bridge-port/priority-regeneration item.

interfaces/interface/bridge-port/transmission-selection-table