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What is a DMN?

From clause 35.1.1:

"Different kinds of shared media use different techniques to allocate opportunities to transmit, and these techniques can have various dependencies on frame sizes, station-to-station vs. station-to-head data paths, or other factors. Rather than introducing the complexities of every such medium into MSRP, this standard takes advantage of the presence of a controlling entity to map medium-specific characteristics to the capabilities of MSRP."

DMN Node Responsibilities

- A device that can speak MSRP on behalf of all other devices on a shared medium
- The single shared medium device that must understand MSRP and map it into the local QoS techniques
 - Note that the DMN functionality can migrate to other nodes
- Update pass/fail status of MSRP Registrations and forward appropriate Declarations

Non-DMN Node Responsibilities

- Must recognize MSRP frames from the wired network and forward to DMN
 - Destination address: 01-80-C2-00-00-22
 - EtherType: xx-xx
- Must forward MSRP frames from the DMN back onto the wired network if appropriate
- All QoS transactions will be done via techniques applicable to local medium (e.g. 802.11 HCCA, MoCA PQoS)

Why Have a DMN?

- Each shared medium node could simply map MSRP to local QoS techniques
 - Acceptable solution if it makes sense
 - Do we want to force MSRP capabilities to be put into every node? (802.11 seems to be the perfect example, just put it in the AP, not in every station).
- Place overhead of MSRP to local QoS mapping on one node – that's the DMN

MSRP DMN Questions

Do specific DMN definitions belong in Qat?

- Will MoCA recognize any authority of 802.1Qat to describe how MoCA networks should operate?
- Likewise, does 802.11 DMN definition belong in an 802.11 document?
- Should these definitions be moved to an Informative Annex, leaving a generic description in Clause 35?
- Wherever they end up we want to guarantee interoperability between vendors