Designated MSRP Node (DMN)

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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