Title: Liaison on P802.1ASeb draft PAR

From: IEEE 1588 Working Group,

To: IEEE 802.1 Working Group
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Dear Colleagues,

This liaison provides comments from the IEEE 1588 Working Group regarding the draft PAR for IEEE P802.1ASeb, posted publicly on the site for IEEE 802 PARs & ICAIDs under consideration. The proposed project P802.1ASeb specifies an option to disable use of the Announce message in IEEE Std 802.1AS.

In the past, requests were submitted to the IEEE 1588 Working Group for IEEE Std 1588 to be modified with an option to disable use of the Announce message when port states are externally configured. This was discussed in the IEEE 1588 Working Group and voted down. However, the project scope of P802.1ASeb indicates a willingness to avoid conformance to IEEE Std 1588 in order to obtain the option. This persistence suggests that the IEEE Std 802.1 Working Group has identified an end user requirement that is important for some use cases. For that reason, the IEEE 1588 Working Group has agreed to discuss this issue again, with the intent of starting an amendment to IEEE Std 1588 which specifies an option to disable use of the Announce message.

As specified in 10.5.4 and 11.3.5 of IEEE Std 802.1AS-2020, IEEE Std 802.1AS uses the EtherType of IEEE Std 1588 for its messages. For layer-2 protocols like IEEE Std 802.1AS, the EtherType advertises the protocol

specifications to which the frame conforms. The IEEE RA tutorial on EtherType describes the concept of sub-types for the EtherType, and IEEE Std 1588 specifies such sub-types (e.g., sdoId). Nevertheless, the sub-types are intended for capabilities and aspects of the protocol, not to specify a distinct protocol that is non-conformant to the EtherType's specifications.

IEEE Std 1588 clearly specifies that the Announce message is a requirement for conformance (e.g. 9.5.8 of IEEE Std 1588-2019). In order for a protocol to use the EtherType of IEEE Std 1588, use of Announce is currently required. Therefore, if the P802.1ASeb project intends to use the EtherType of IEEE Std 1588 when Announce is disabled, an amendment to IEEE Std 1588 is necessary.

Cooperation between the IEEE 802.1 and 1588 Working Group has served the world well in the past, and we look forward to continued cooperation in the future.

Respectfully submitted,
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