Title:	Liaison response to IETF LSVR WG Work on LSoE (Link neighbor, liveness and encapsulation discovery)
From:	IEEE 802.1
For:	Review
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To:	IETF LSVR WG – Gunter Van de Velde, co-Chair, IETF LSVR WG, lsvr-chairs@ietf.org – Victor Kuarsingh, co-Chair, IETF LSVR WG, lsvr-chairs@ietf.org
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Thank you for your liaison regarding IETF LSVR WG Work on LSoE (Link neighbor, liveness and encapsulation discovery). The IEEE 802.1 WG is aware of the LSoE (Link State over Ethernet) contribution and the call for working group adoption within the LSVR (Link State Vector Routing) working group.

As stated in your liaison, the LSoE protocol intends to provide link discovery, an exchange of supported encapsulations (IPv4, IPv6, ...), discovery of encapsulation addresses (Layer 3 / MPLS identifiers) over raw Ethernet, and layer 2 liveness checking. The LSoE protocol itself does not maintain link state, but rather supports the LSVR protocol with the discovery, information exchange and liveness checking. We believe the name of this protocol misrepresents its purpose and creates confusion with the existing IEEE 802.1 Layer 2 link state protocol known as SPB (Shortest Path Bridging) and fully specified in Clauses 27 and 28 of IEEE Std 802.1Q-2018.

IEEE 802 also has standardized a widely deployed layer 2 discovery protocol known LLDP (Link Layer Discover Protocol) as specified in IEEE Std 802.1AB-2016. We believe that it would be undesirable for the industry to have multiple discovery protocols and any new protocol developed should have backward compatibility with the widely deployed IEEE Std 802.1AB-2016. We understand that the current LLDP protocol does not meet the requirements to support the LSVR protocol. Individual contributions proposing enhancements to the existing LLDP protocol are currently under consideration by the IEEE 802.1 WG. These proposals intend to meet the needs of LSVR. One such proposal is available at http://www.ieee802.org/1/files/public/docs2019/new-congdon-lldpv2-consideration-0119-v01.pdf. An analysis of the LSVR requirements against this proposal was presented at the IEEE 802.1 Interim in January, 2019 and is available at http://www.ieee802.org/1/files/public/docs2019/new-congdon-lsvr-disco-requirements-for-LLDPv2-0119-v01.pdf. There is currently no active project within IEEE 802.1 to enhance LLDP to meet the needs of LSVR, however, existing solutions for layer 2 liveness include Connectivity Fault Management (CFM) specified in Clauses 18-22 of IEEE Std 802.1Q-2018. Your contribution to IEEE 802.1 and collaboration on these proposals are welcomed.

We look forward to continued collaboration through individual contributions and the IEEE 802 – IETF Coordination Group. We welcome ongoing communication with LSVR through the IEEE 802.1 email reflector, scheduled conference calls (http://www.ieee802.org/1/tsn/tsn-task-group-agenda/#Upcoming_conference_calls), or face-to-face meetings (http://www.ieee802.org/1/meetings).

Respectfully submitted,
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