What is this about?

How EVPN control plane can be used:

• W/ Generic Network Virtualization Encapsulation (Geneve) encapsulation in NVO3.
• By Network Virtualization Endpoints (NVEs) to express as well what Geneve tunnel option TLV(s) that they can transmit and/or receive.
BGP extensions

Specifies a new BGP Tunnel Encapsulation Type for Geneve and a new Geneve tunnel option types sub-TLV.

The Geneve tunnel option types is a new BGP Tunnel Encapsulation Attribute Sub-TLV.

+-----------------------------+
| Sub-TLV Type (1 Octet)      |
+-----------------------------+
| Sub-TLV Length              |
+-----------------------------+
| Sub-TLV Value (Variable)    |
+-----------------------------+
Operations

NVE(s) sets:

• The BGP Encapsulation extended community in all EVPN routes advertised
• The BGP Tunnel Encapsulation Attribute Tunnel Type to Geneve tunnel encapsulation.
• The Tunnel Encapsulation Attribute Tunnel sub-TLV for the Geneve tunnel option types with all the Geneve option types it can transmit and receive.

All NVE(s) learn what Geneve option types are supported by other NVE(s) through the EVPN control plane.

In the datapath, NVE(s) only encapsulate overlay packets with the Geneve option TLV(s) that other NVE(s) are capable of receiving.
Next steps

• Update more the sections on Negotiating TLV ordering, Size and total option length
• Seeking comments?

Thank you