

BGP Dissemination of FlowSpec for Transport Aware Mobility

draft-dmc-idr-flowspec-tn-aware-mobility-03

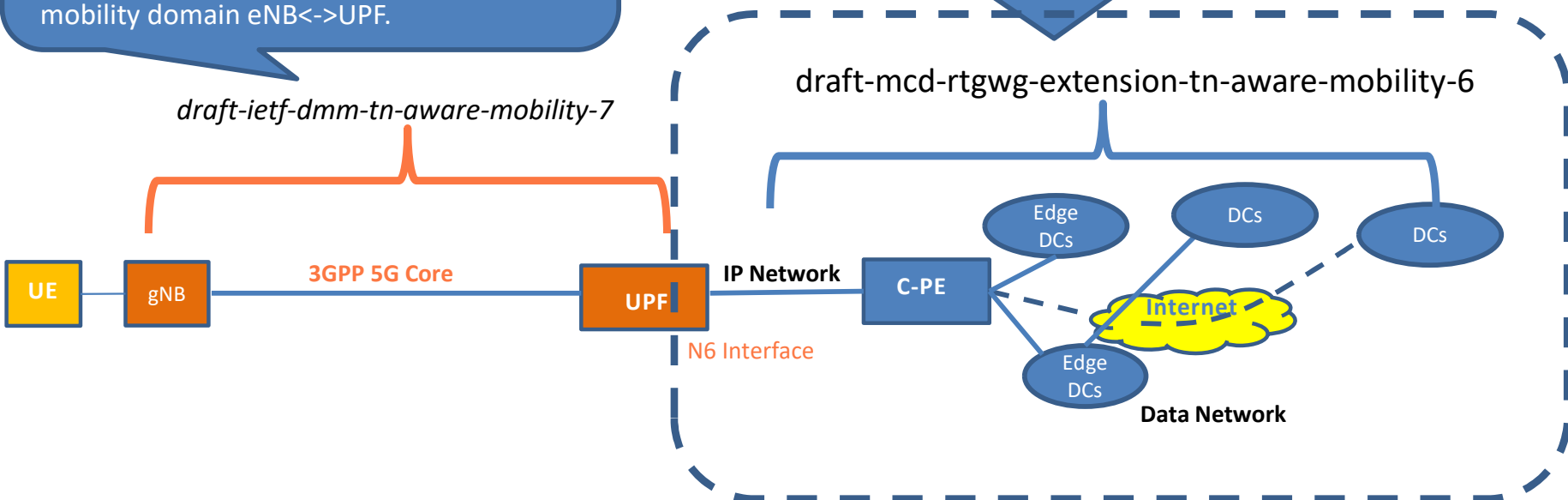
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Background

The existing Transport Network Aware Mobility for 5G defines a framework for mapping the 5G mobile systems Slice and Service Types (SSTs) to corresponding underlying network paths. The focus of that work is limited to the mobility domain eNB<->UPF.

To maintain E2E transport network characteristics the framework needs to be extended:
UPF<->Service instances.



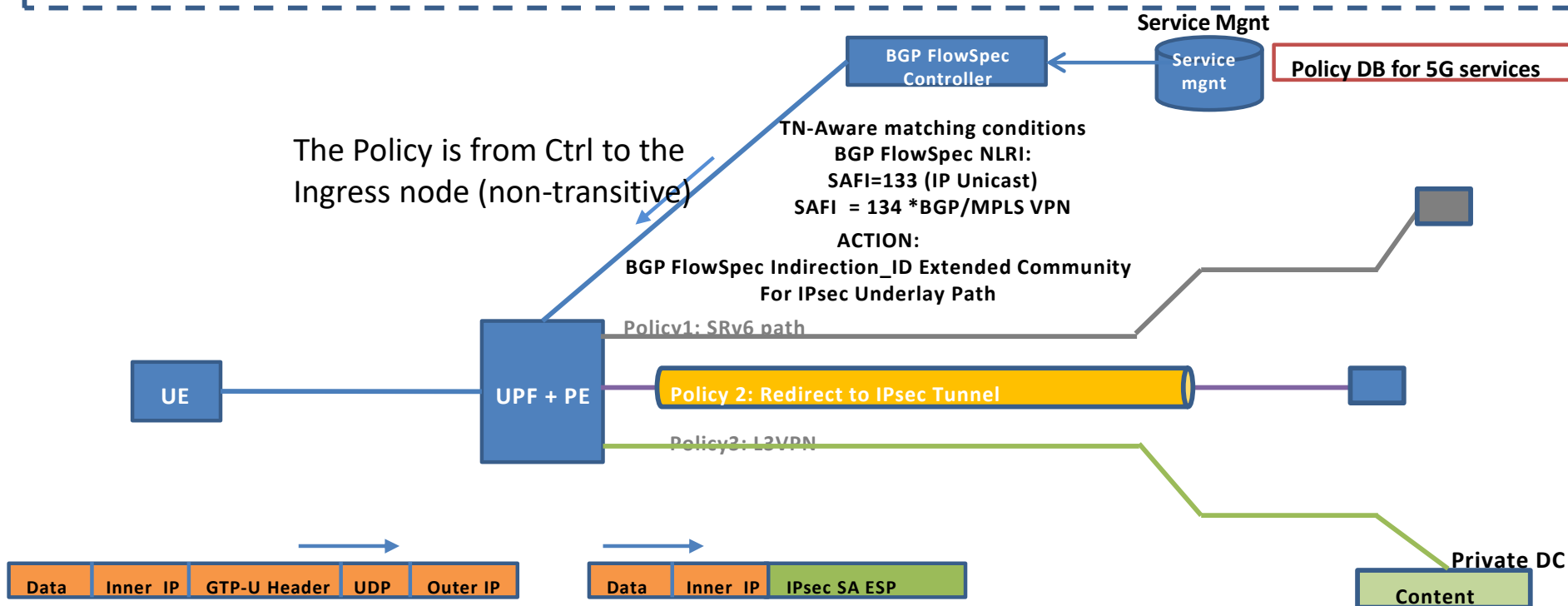
BGP FlowSpec Traffic Redirect

- Redirect to IP tunnel: draft-ietf-idr-flowspec-path-redirect-12
- Redirect IP: draft-ietf-idr-flowspec-redirect-ip-09
- Redirect to SRv6 path: draft-ietf0-idr-srv6-flowspec-path-redirect-10

➤ **Redirect to IPsec tunnels (SD-WAN)**

➤ **Need IANA to assign a new type:**

0x49 FlowSpec Redirect to Indirection-id Non-transitive Extended Community.



Extension: redirect to IPsec Tunnel

FlowSpec Redirect to Indirection-ID Extended Community (Non-Transitive):

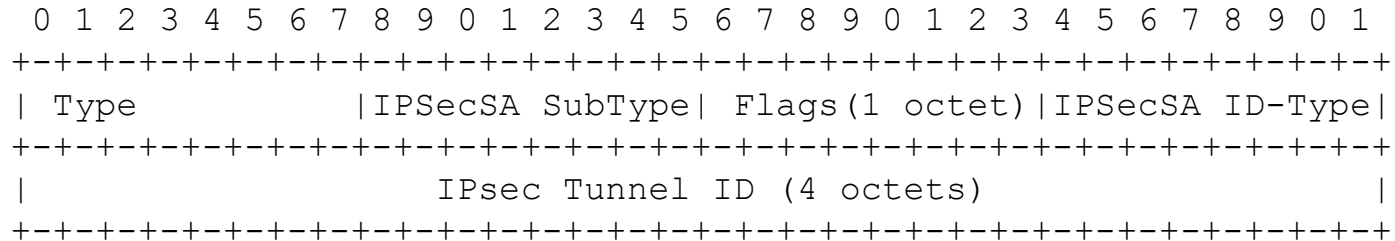


Figure 3: Redirect to Ind-ID Ext Community for IPsec Tunnel

Where
Type = (to be assigned by IANA): Non-Transitive FlowSpec Redirect to Indirection-ID Extended Community.

Sub-Type: IPsec SA: its value (To be assigned by IANA):
indicate the ID carried is IPsec SA ID (pre-established).

Flags: Same as that defined in [Flowspec-path-redirect].

IPsec SA ID-Type: needed for IPsec IPv4 tunnel (to be assigned by IANA)
Inner Encap type = IPsec+GRE
Inner Encap type = IPsec+Vxlan

Next Steps

- **Ask for WG Adoption**