

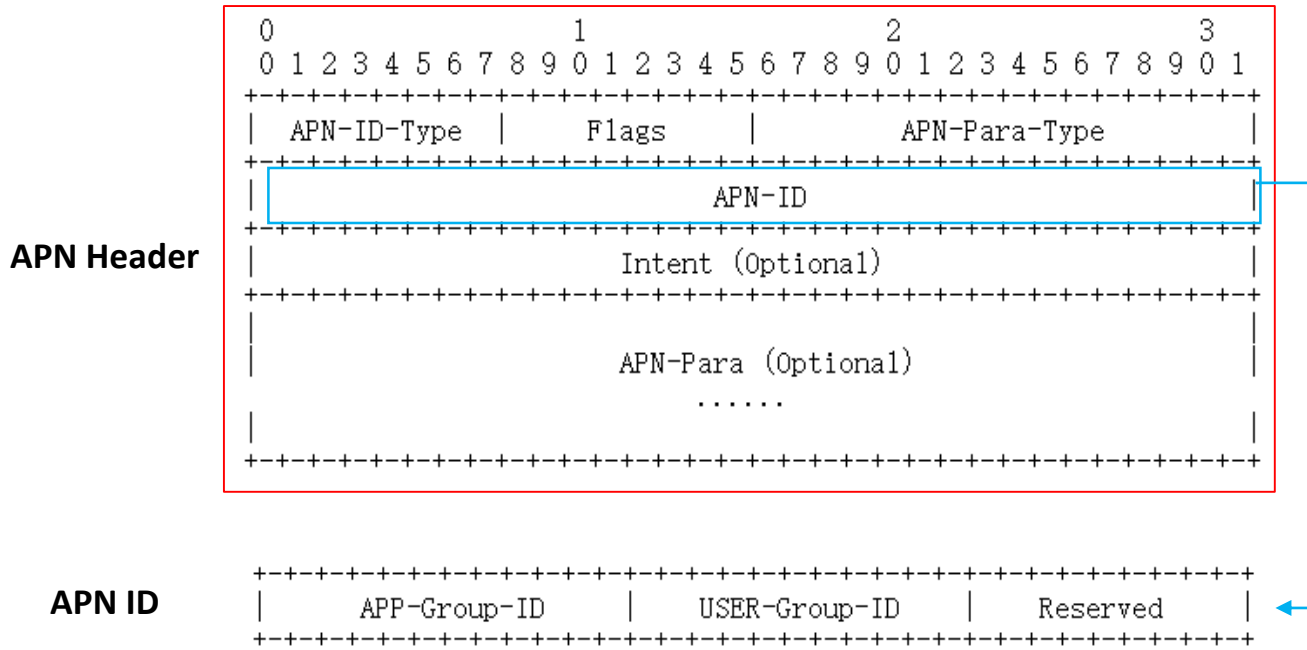
Application-aware IPv6 Networking (APN6) Encapsulation

<https://datatracker.ietf.org/doc/html/draft-li-6man-apn-ipv6-encap-00>

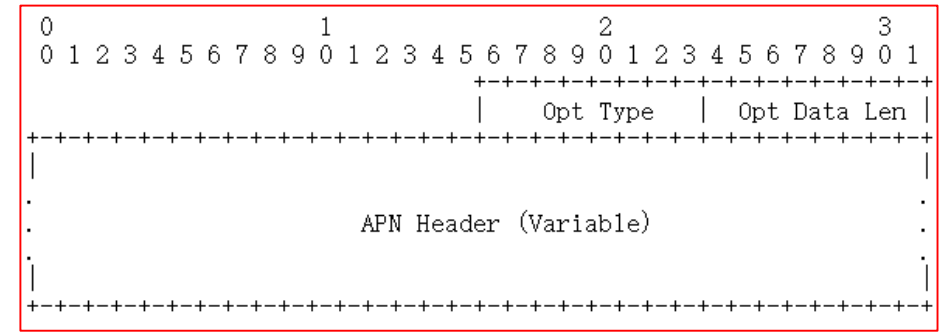
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Summary of draft

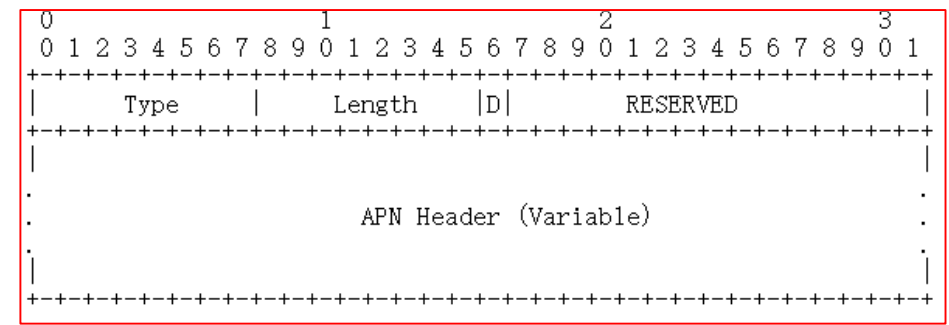
- **Application-aware IPv6 Networking (APN6)** makes use of IPv6 encapsulation to convey the **APN Header** with data packets in the network **to make the network aware of fine-grained requirements at appropriate level.**
- **The APN Header carries APN attribute that is composed of APN ID and APN parameters.**
- **APN attribute** is a structured value, treated as an opaque object in the network, to which the network operator applies policies in various nodes/service functions along the path and provides corresponding services.
- **This document defines the APN header and its encapsulation in the IPv6 data plane.**



IANA is requested to create the following registry on the **Application-Aware Networking (APN) Attribute webpage:**
 Name: **APN ID Types** (0, 1, 2, 3, ... 255)
 Name: **APN Parameter Types** (0, 1, 2, 3, ... 15)



The APN Option carried in HBH and DOH (Option Type: 0x13)



The Optional APN SRH TLV (SRH TLV Type: 0x13)

Next Steps

- Over the years, there have been a few deployments of APN in customers' networks
<https://datatracker.ietf.org/doc/html/draft-lxm-rtgwg-apn-deployment-status-00>
- Discover more use cases and refine the solution in the draft
- Collaborate on more potential deployments
- Request early allocation of codepoints for the interop tests