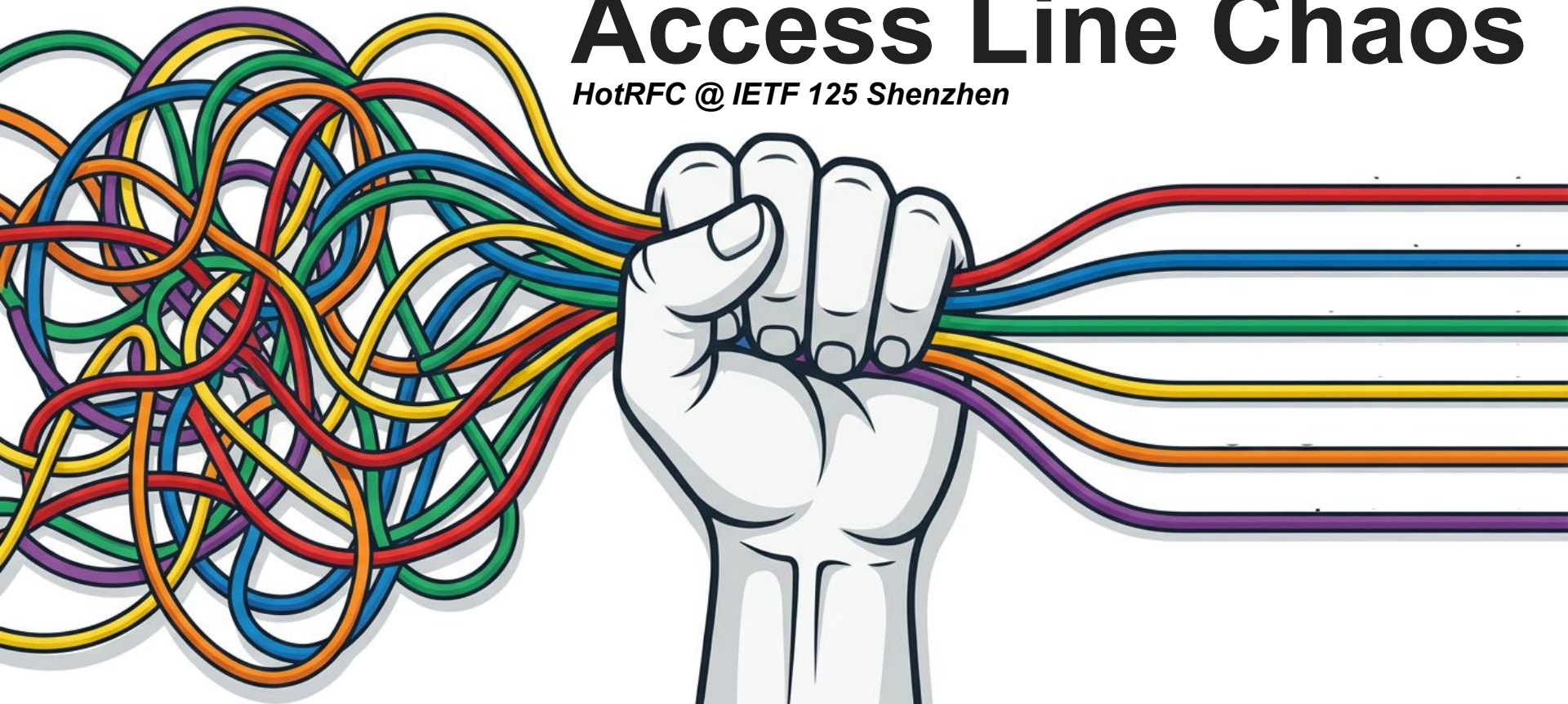


# Access Line Chaos

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# Access Line Identification and Characterisation Attributes

These attributes are generated by the access node (DSLAM, OLT) and utilized by the BNG, LNS (L2TP) and RADIUS. The transmission method involves either sending them inline (via header enrichment) or using the ANCP protocol.

- **Identification Attributes**

- Agent-Remote-Id
- Agent-Circuit-Id
- ...



**Line-Id, option-82, ...**

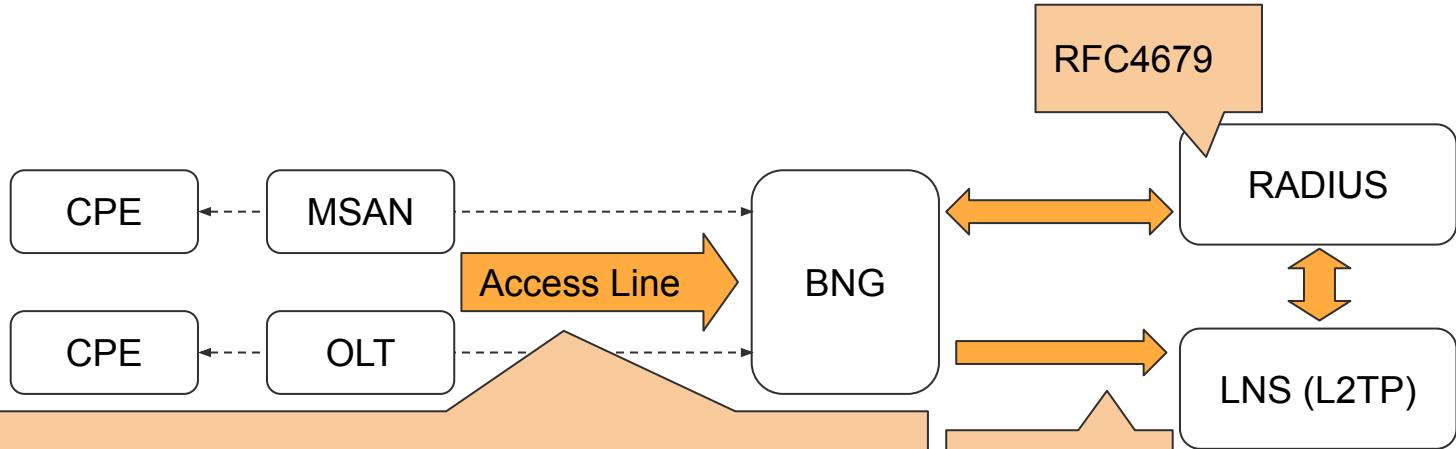
- **Characterisation Attributes**

- Actual-Data-Rate-Upstream
- Actual-Data-Rate-Downstream
- ...

This data is used for functions such as authentication, accounting, QoS and is also exchanged with wholesale partners, making it a key enabler of open access.

# Problem

Attributes are defined across fragmented standards but use identical numbers across all protocols. The number space faces indirect governance conflicts, BBF controls via vendor-id while IANA manages ANCP allocations, risking overlaps.



**ANCP** (RFC6320, draft lihawi, ...)  
**PPPoE Intermediate Agent** (TR101, TR156, TR178, TR-301)  
**Layer 2 DHCP Relay Agent**  
**Lightweight DHCPv6 Relay Agent** (TR177, RFC6221)

## Next Actions

- Find people interested in access line attribute interoperability
- Ensure that all used attribute numbers are reserved
- Draft comprehensive solution document with unified attribute registry

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