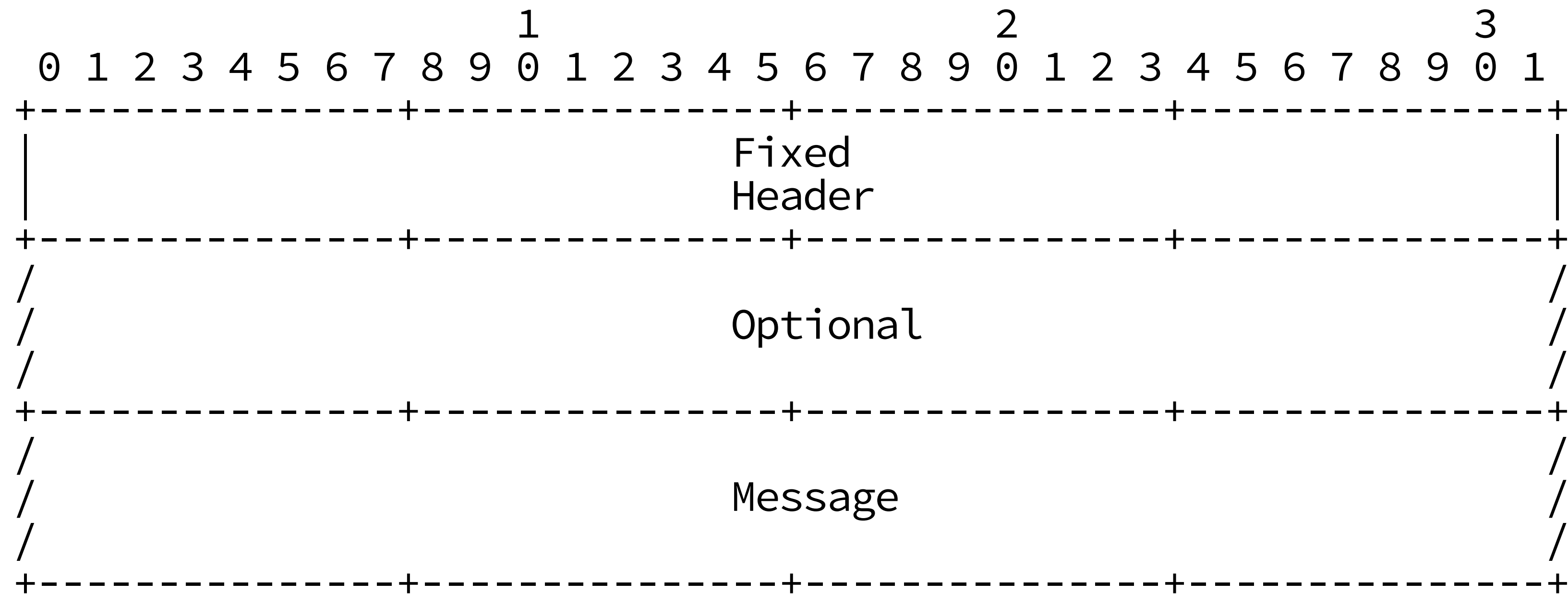


CCN Packet Formats

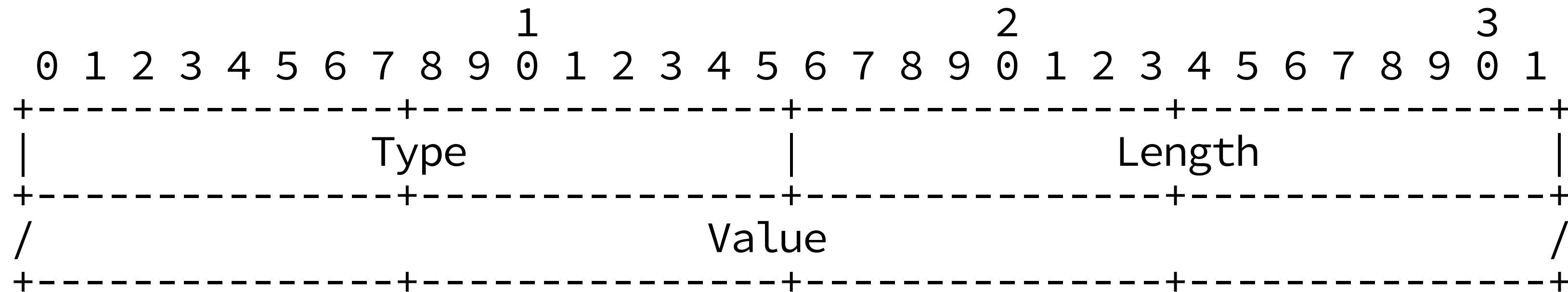
ICNRG Interim Meeting - Paris
2014-09-27

Nacho (Ignacio) Solis
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Palo Alto Research Center

Packet Structure



2+2 TLV Format



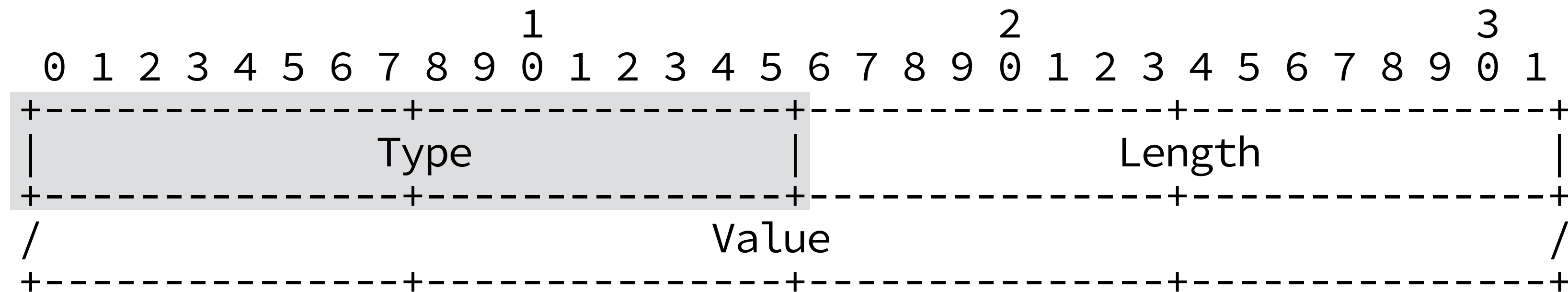
2-Byte Type

- Enough for expansion and experiments
- Inherently hierarchical (not many types)
- Fast to jump over (no parsing needed)
- No aliasing (0 vs 00)
- Canonical sorting

2-Byte Length

- Don't cover what doesn't fit in a packet
- Enough for large fields like payload
- Fast to jump over (no parsing)
- No aliasing (0 vs 00)
- Canonical sorting

Type space



Flat Type

Simple

No ambiguity

Coordination

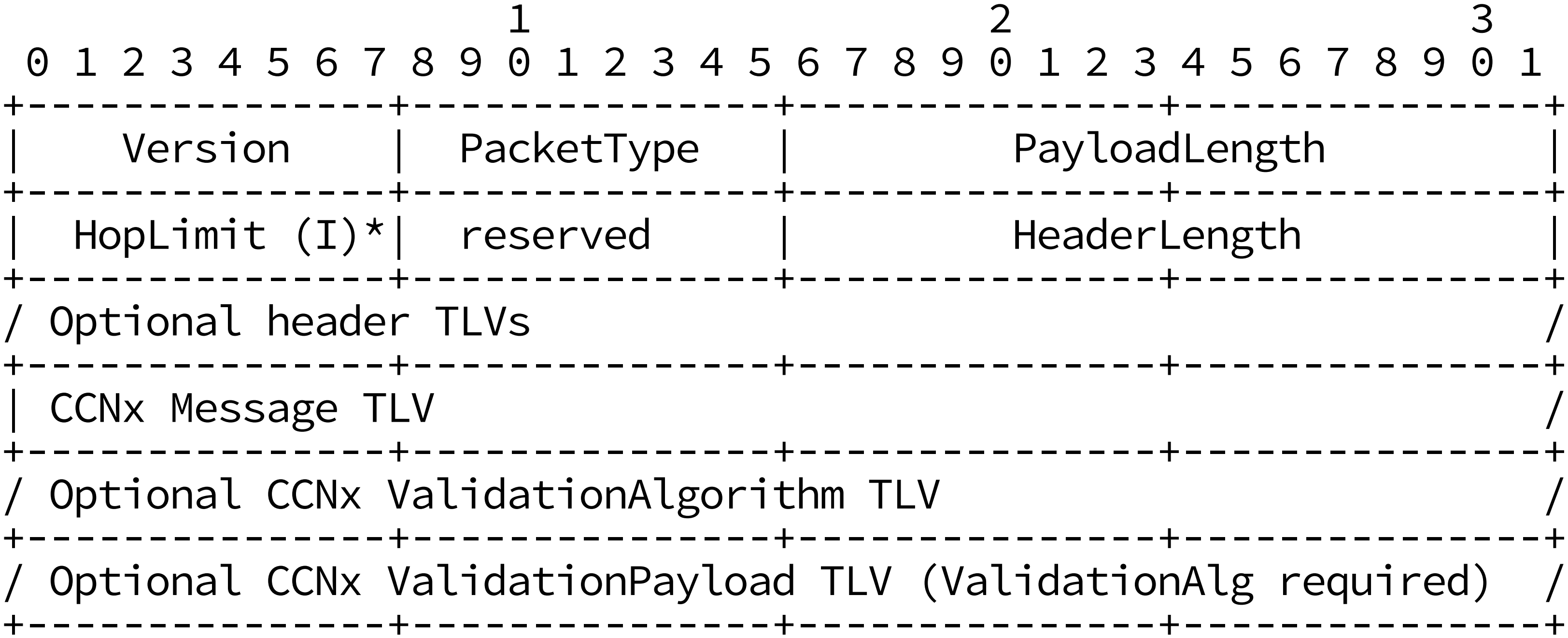
Hierarchical

Compartmentalization

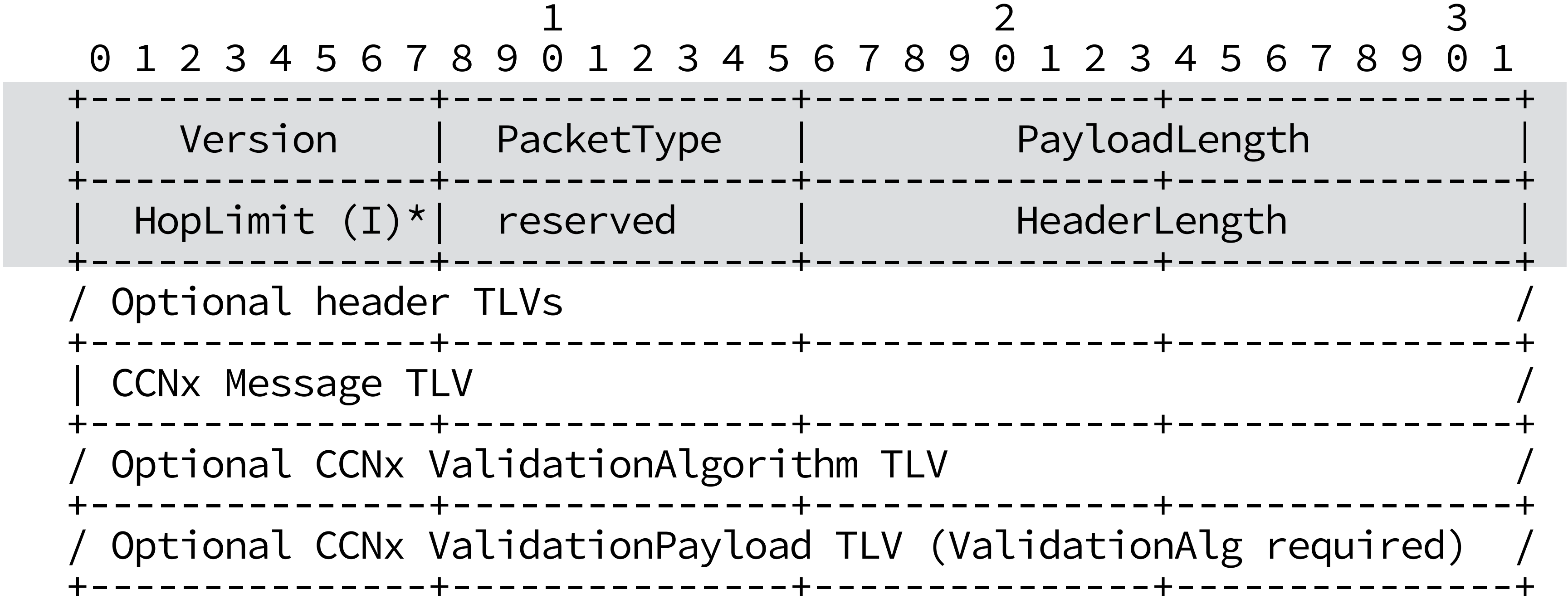
Typespace for name components

Vendor/App specific

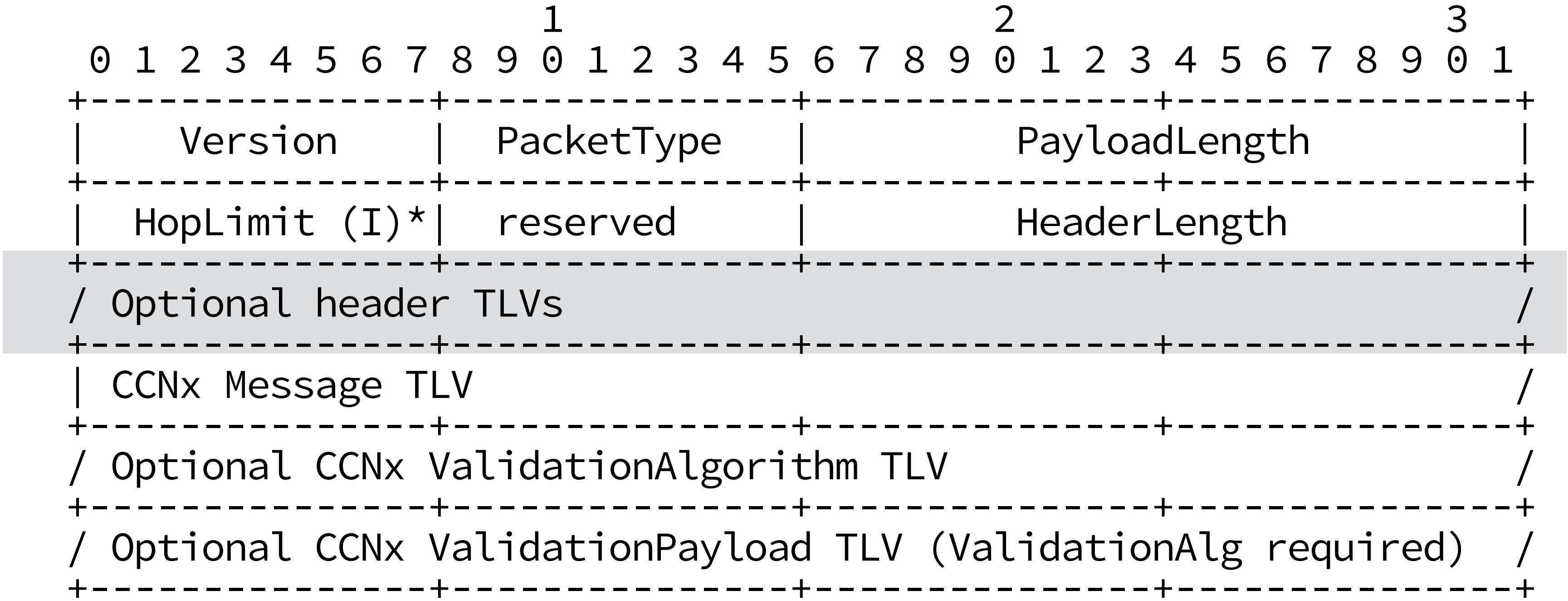
CCN Packet



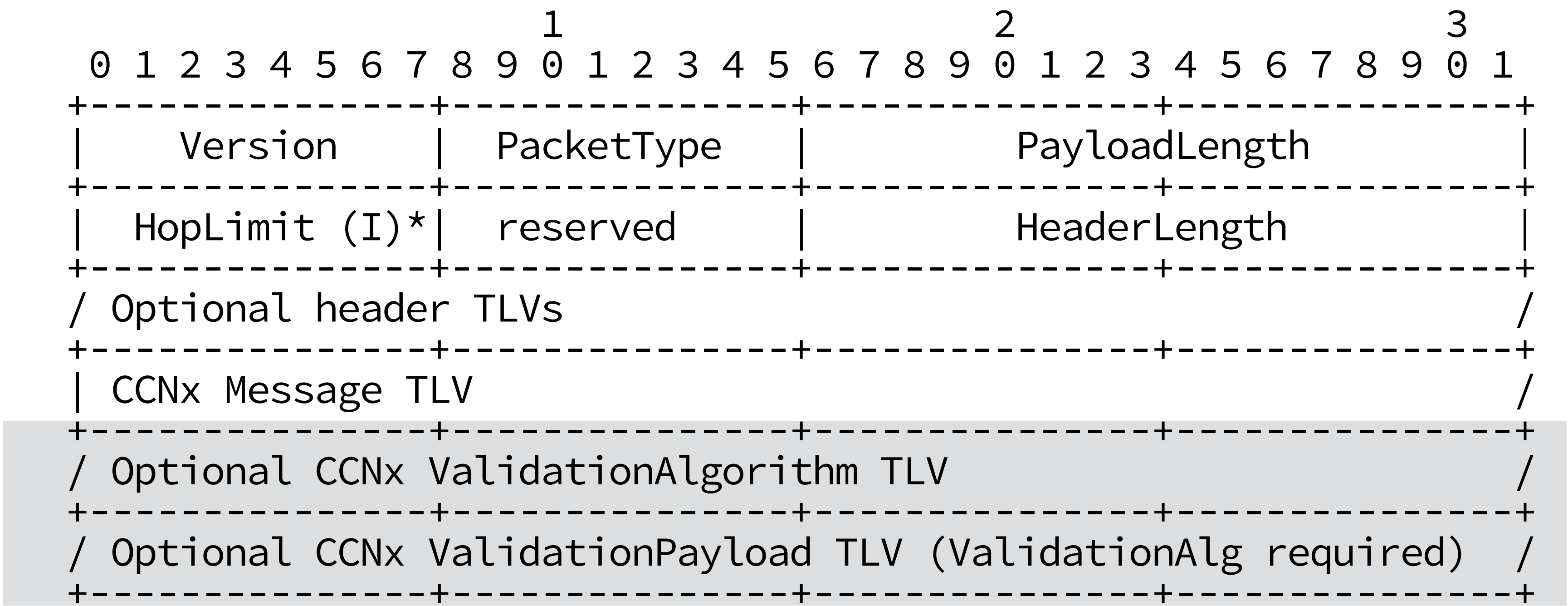
Static Header



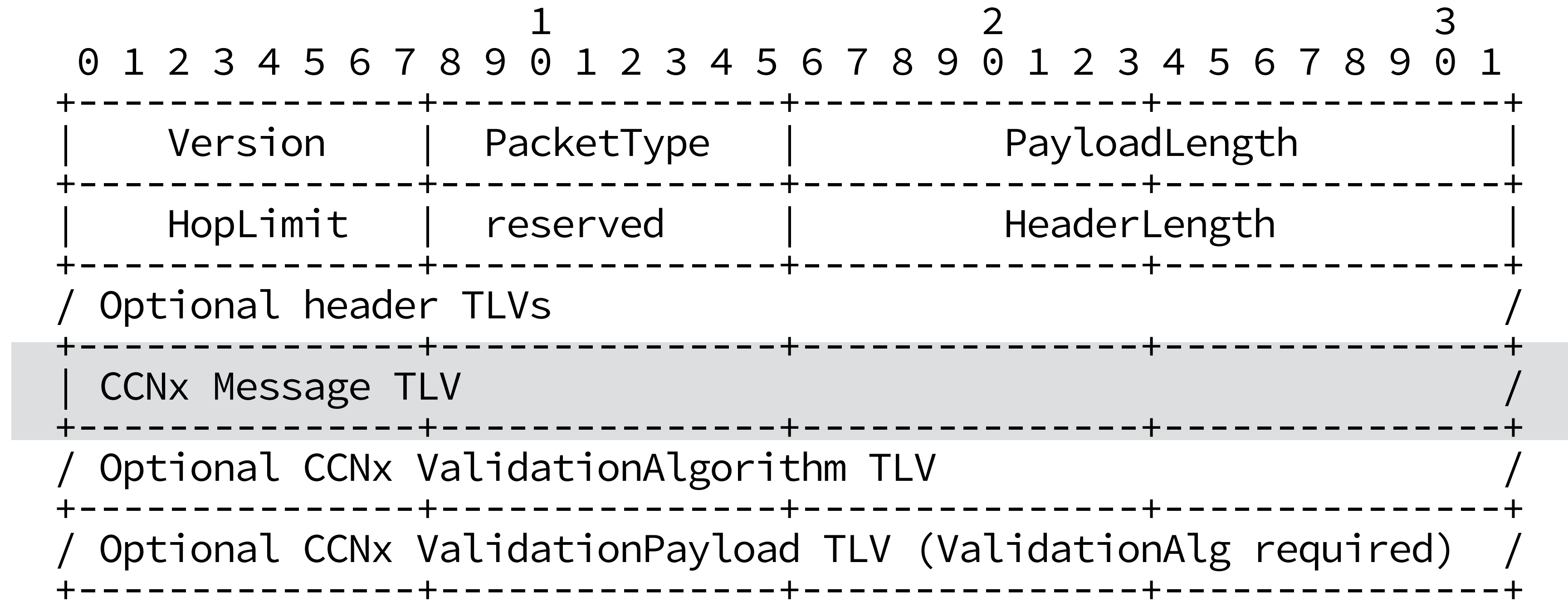
Optional Headers



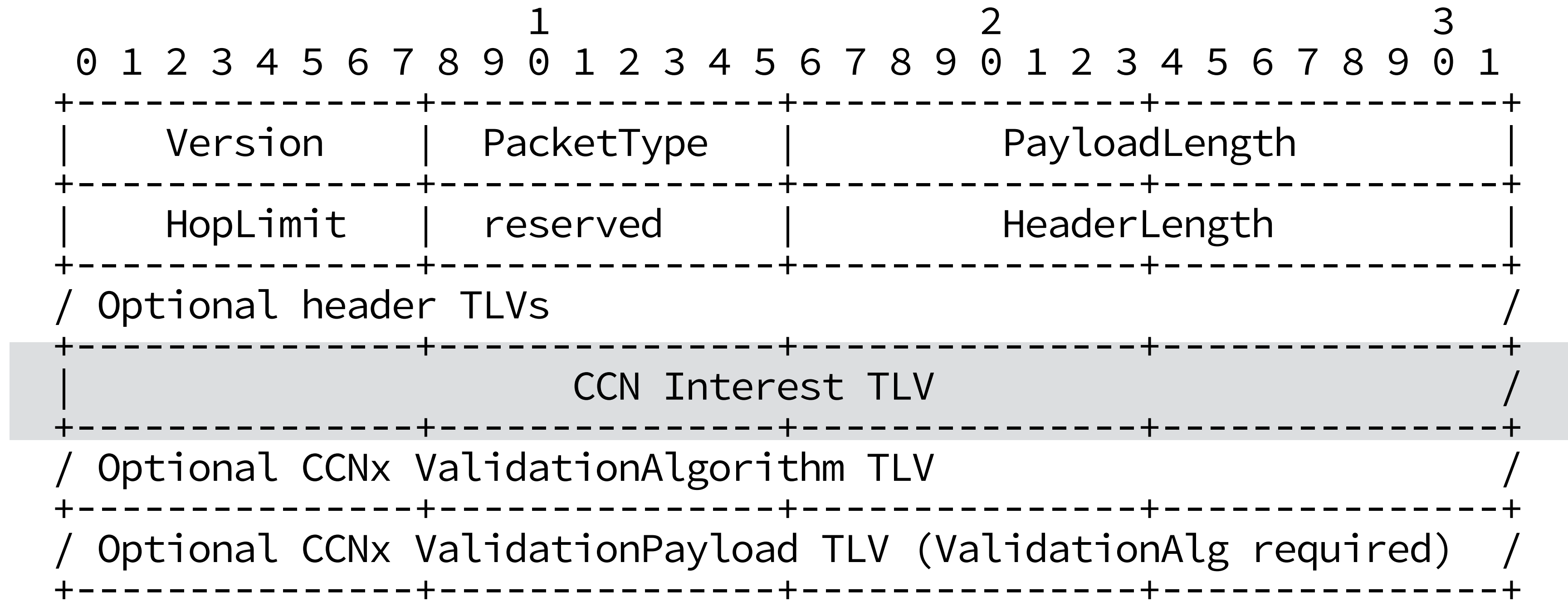
Validation



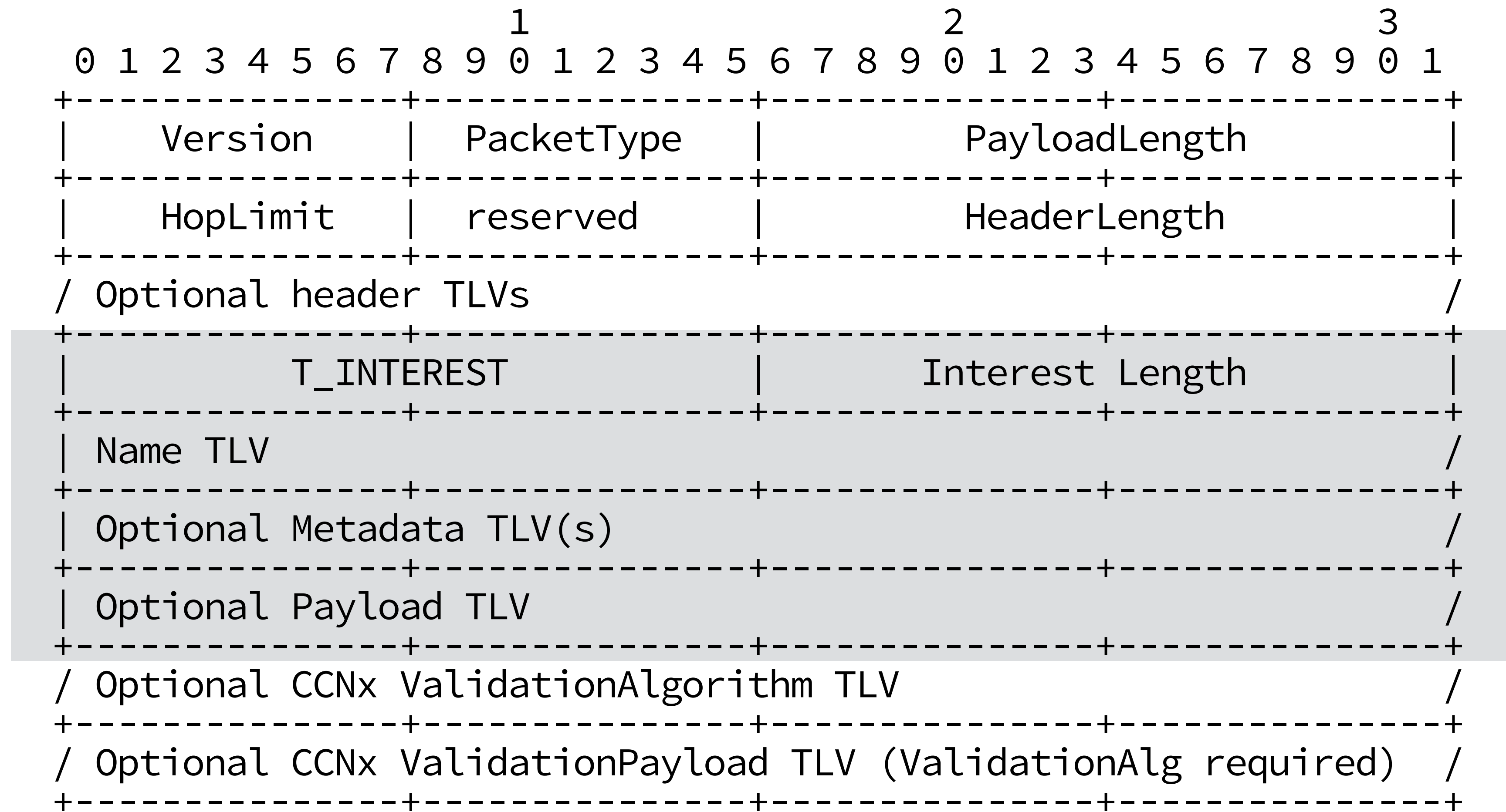
CCN Message



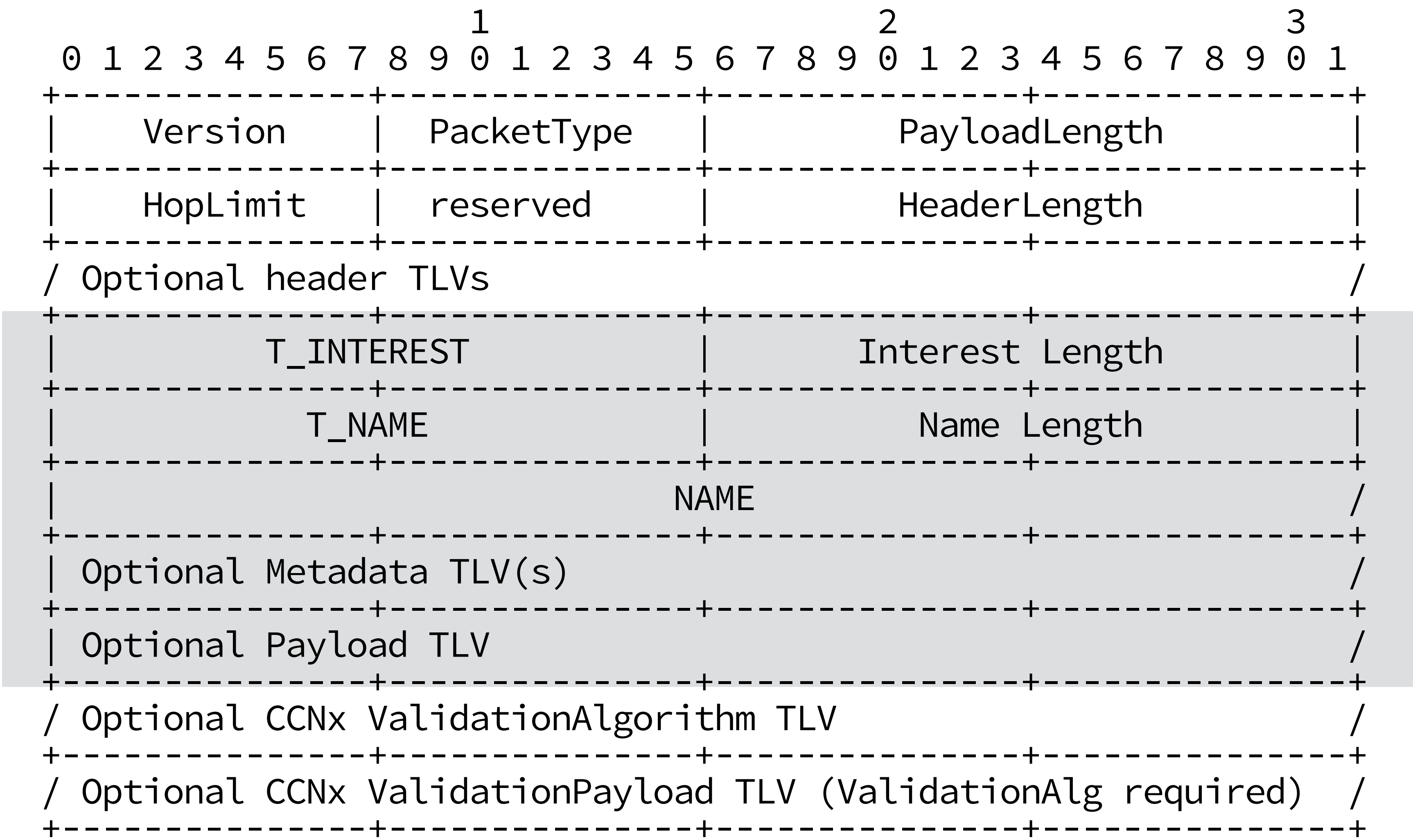
Interests



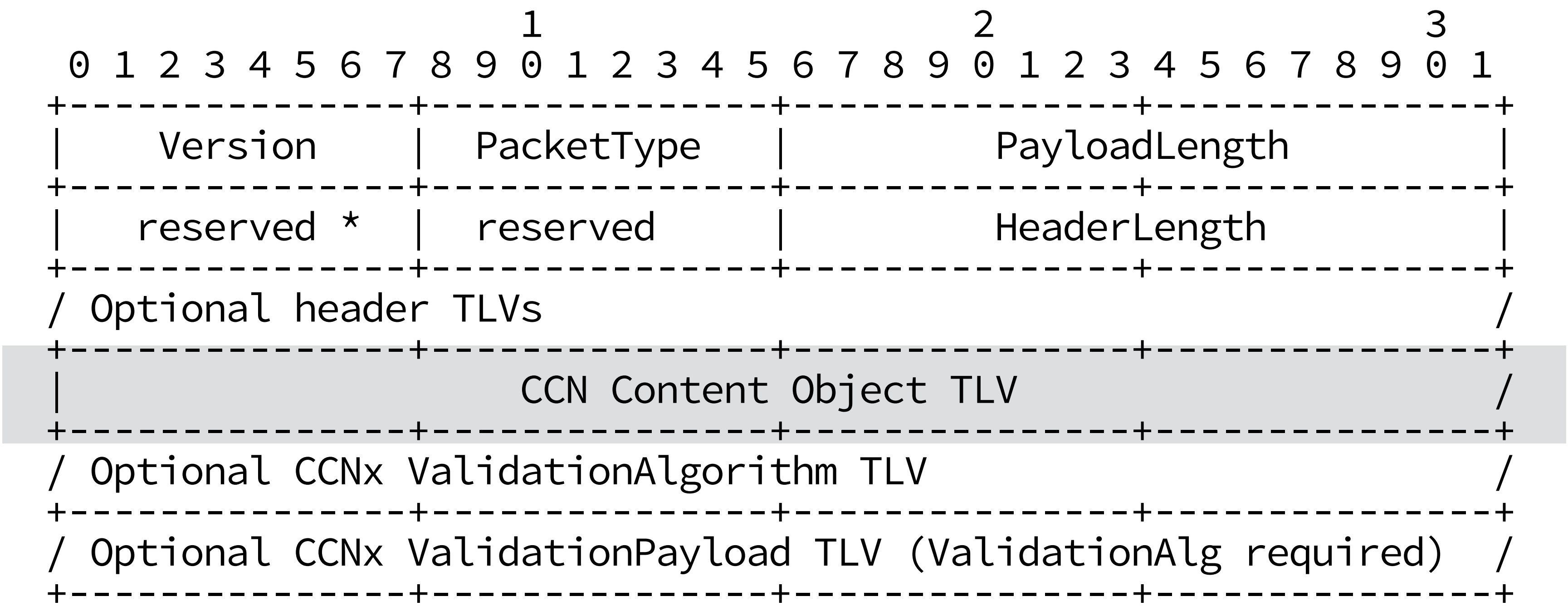
Interests



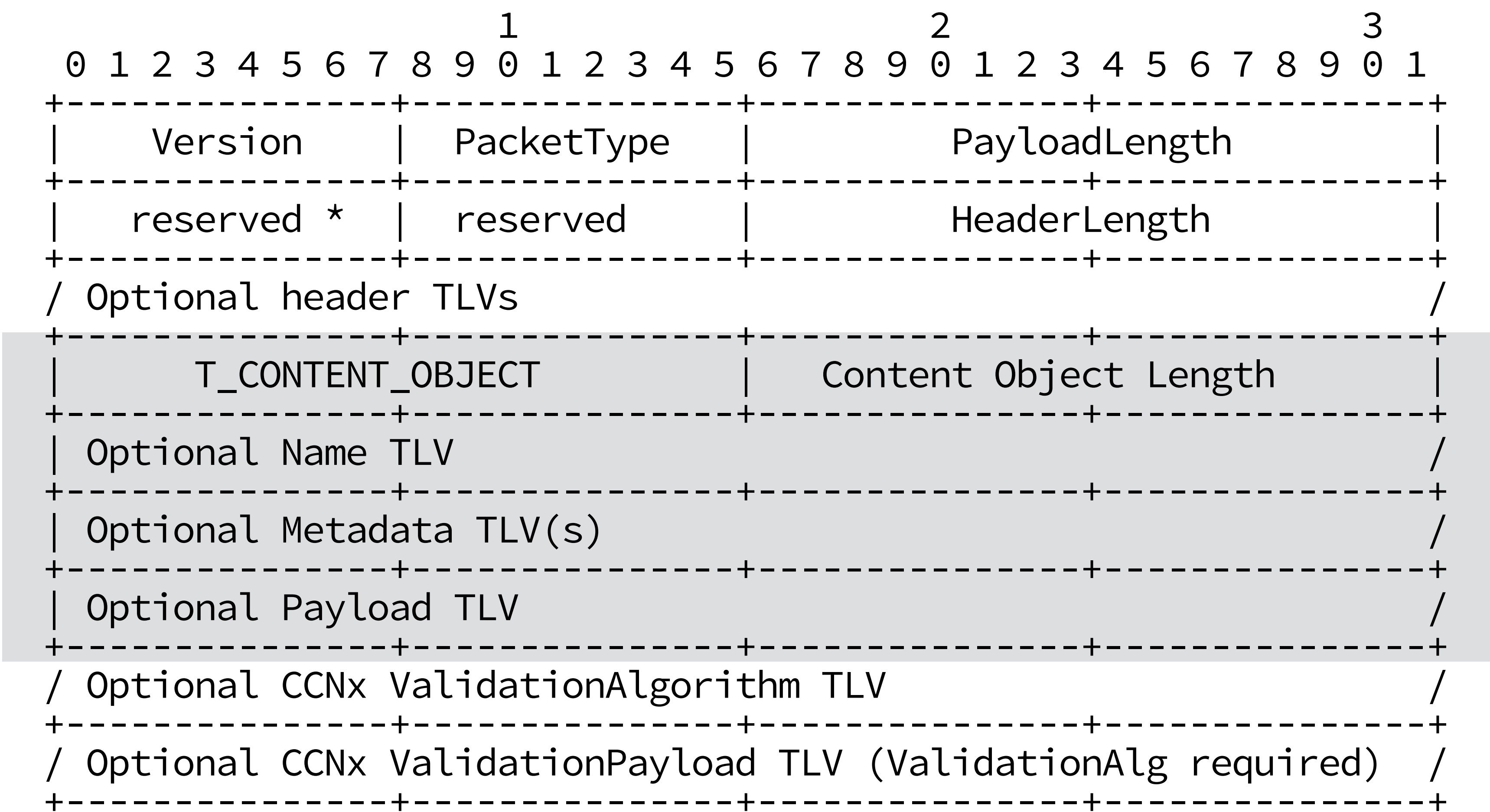
Interests



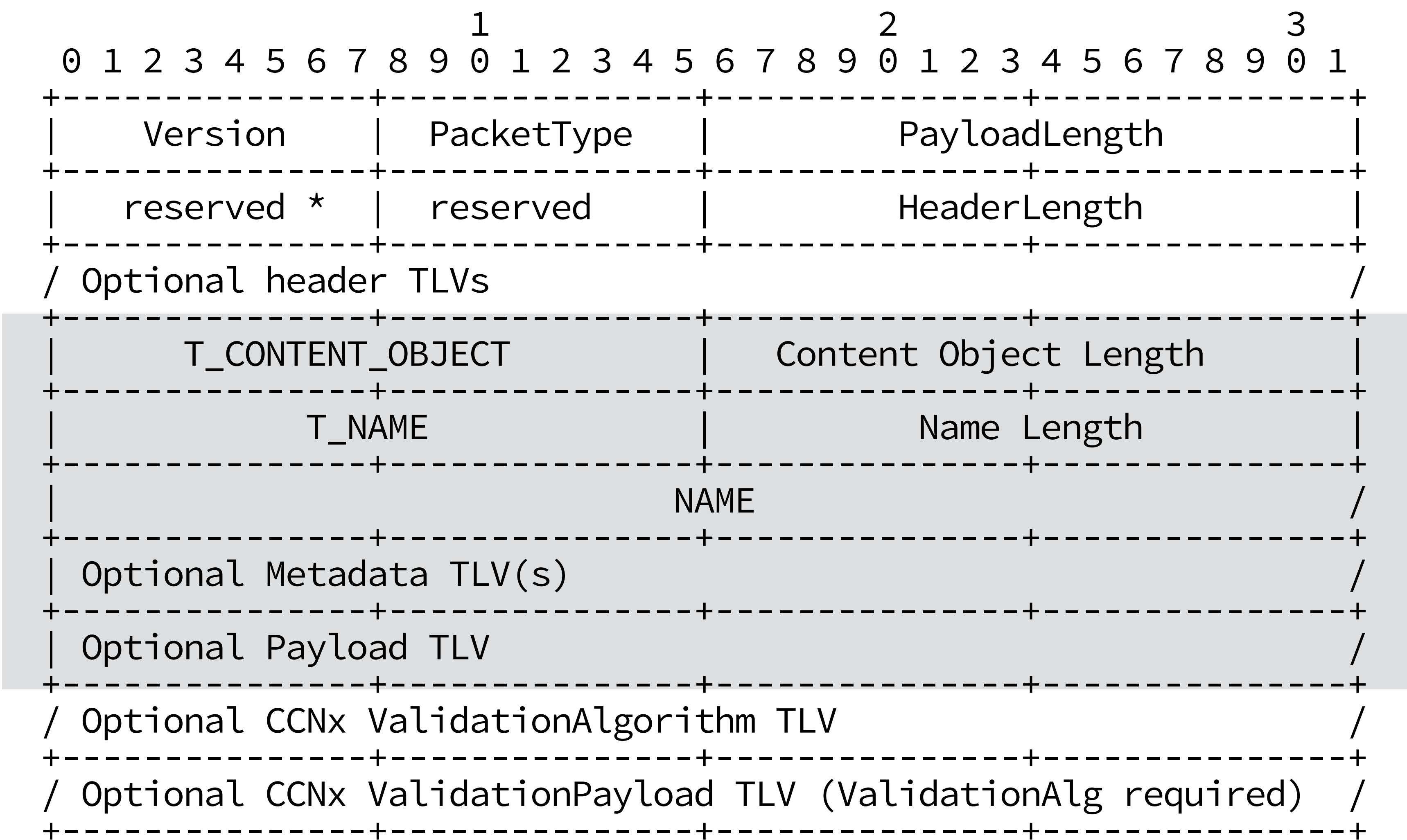
Content Packet



Content Objects



Content Objects



Agreement Topics

Static header agreement

TLV agreement

Parsing agreement

Type agreement

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