# IPv6 Extension Headers

draft-ietf-6man-exthdr-02.txt

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# What happened?

- The draft consisted of three separate but related parts
  a) A consistent format for extension headers
  b) A single IP protocol number allocation for saving protocol number space
  c) A set of bits that specify drop/error behavior
- Since the last IETF it has become clear that there is no consensus to keep b) and c) in the document
  – We have removed b) and c) from the draft

# What is the preferred mechanism?

- WG participants also raised concerns that new extension headers
  - Will break some deployed silicon
  - Are not suitable for incremental deployment
- Because of this the draft will NOT RECOMMEND using extension headers
  - It will direct implementers to consider using destination options instead

# Applicability Statement

› A new applicability statement has been added

"…implementations **SHOULD use destination options as the preferred mechanism** for encoding optional destination information, and use a new extension header only if destination options do not satisfy their needs. The request for creation of a new IPv6 extension header MUST be accompanied by an specific explanation of why destination options could not be used to convey this information."

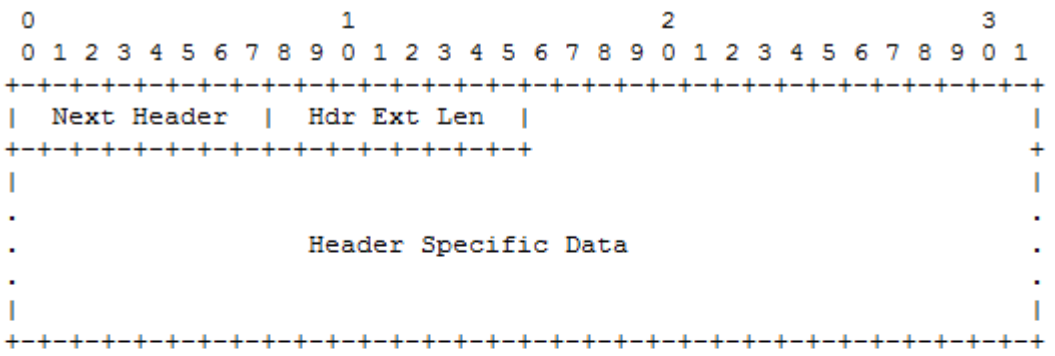
# Way forward

- We have addressed all comments received on the mailing list and minimized the draft to the bare basics
- What about the stuff we removed?
  - Does anyone still care about them. Please speak up if you do.
- Otherwise, the authors believe that the document will be ready for WGLC after one minor editorial change
  - John Leslie argued that the term TLV is not relevant in this document. We will agree to a new wording and make this change

ERICSSON

# Backup Slide: Standard header format

› For all new extension headers




| | |
|---|---|
| Next Header | 8-bit selector. Identifies the type of header immediately following the Extension header. Uses the same values as the IPv4 Protocol field. |
| Hdr Ext Len | 8-bit unsigned integer. Length of the Extension header in 8-octet units, not including the first 8 octets. |
| Header Specific Data | Variable length. Fields specific to the extension header |

Figure 1: Extension header layout