

# BIER in IPv6

draft-zhang-bier-bierin6-00

BIER WG

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# Motivation

- Environments like HomeNet may not have hardware support for BIER encapsulation, MPLS or even support for special Ether Type.
- Native IPv6 encapsulation for BIER hop-by-hop forwarding in pure IPv6 environments could allow to process BIER in the “slow path”, i.e. control plane processor.
- BIER is simply another “next protocol” of an IPv6 frame.

# IPv6 header

- **Packet Destination:** The neighbor's link-local address or one of the loopback interface addresses (Neighbor's BFR-prefix).
- **Packet Source:** One of the BFIR's loopback interface address (BFIR's BFR-prefix).
- **TTL:** Set to 1.
- **Next-protocol:** TBD to indicate the following BIER packet.
- **Flow-id:** Copy of the entropy field in BIER encapsulation.

# BIER header

- Aligned with the format defined in ietf-bier-mpls-encapsulation for a non-mpls version.
- **S and TC bits:** have no significance.
- **BIFT-id:** Combination of <SD, SI, BSL>.
- The remaining fields are unchanged with ietf-bier-mpls-encapsulation.

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- Comments are welcome 😊

Thanks!