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.
BIER in IPv6

• Comments are welcome 😊

Thanks!