Recap: BIER Multicast Overlay for HTTP Response, Rev 00

- Example realization of the use case (https://tools.ietf.org/html/draft-ietf-bier-use-cases-06#section-3.10)
- Reference Architecture and Realization of the “multicast overlay” over IPMC and BIER was described
- Pros and Cons for both were considered
- For realization over BIER, operational details including functional elements such as PCE, Service Handler were described
Recap: Reference Architecture over BIER

- The multicast overlay is formed by the BFIR and BFER of the BIER layer and the additional SH (Service Handler) and PCE (Path Computation Element) elements.
Updates from last draft

• Comments from last IETF meeting were addressed
  – Describe deployment options for SH, BFER, BFIR
  – Describe the work done at DVB and BBF

• Updates to the operational procedure
  – Forwarding mechanisms
  – Clarifying the case for reliable transport
Based on the comments from the last IETF meeting, deployment options for SH function is described.

- SH function is assumed to be collocated with BFIR / BFER, which are typically Routers.
- If SH cannot be deployed in the same router, then
  - May be deployed as a separate function outside the router
  - In such scenario, an interface between SH and BFIR or BFER needs to be defined.
References to DVB and BBF

• Related to comments from IETF 102 to include details about DVB work, the draft describes certain details of the work:
  – A Multicast gateway is deployed in a CPE, Upstream Network Edge device or Terminal and provides multicast to unicast conversion facilities
  – Interface "L" between Multicast gateway and Content playback supports fetching of all specified types of Content, Conditional request, Range request, Caching etc.
  – BBF is coordinating with DVB and focuses on developing the device management model.

• Similar to IPMC system, where clients requests for specific content.
Next steps

• Will there be interest in the WG to include other use cases apart from streaming? E.g.
  – File replication in CDNs OR SW updates over HTTP

• We suggest to adopt this draft by WG as an Applicability Statement documenting “How BIER can be applied to aggregate HTTP responses over a BIER infrastructure”.