

# Guidelines for Adding Congestion Notification to Protocols that Encapsulate IP (draft-ietf-tsvwg-ecn-encap-guidelines-08)

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# recap

## draft-ietf-tsvwg-ecn-encap-guidelines-08

- Purpose of this (BCP) draft:
  - Guidelines on addition of explicit congestion notification (ECN) to protocols that encapsulate IP
    - e.g. tunnels, lower layers
- Not straightforward
  - cross-layer
    - some lower layers have very different feedback structure
    - incremental deployment
      - ECN propagation requires new logic in layer-egress and hosts
  - cross-organisation
    - IEEE: <https://datatracker.ietf.org/liaison/1364/>
    - 3GPP: <https://datatracker.ietf.org/liaison/1424/>
- Split out normative updates to standards track RFCs into a fast-tracked draft (PS)
  - draft-ietf-tsvwg-rfc6040update-shim-04



# Recent activity

## ECN visible to RLC?

- Proposal to add ECN support to 3GPP Rel15 protocols that encapsulate IP and are accessible to the Radio Link Control layer [1]
- Relative merits of using a) ECN vs. b) RAN based codec adaptation
  - Jun'17: 3GPP TSG-RAN WG2 “NR (New Radio) Ad Hoc” discussed
  - Various alternative proposals [2] to support 1) both or 2) solely 'b'
  - Considerable misunderstandings of the benefits and implementation implications
  - Decision deferred to August meeting
- Pls encourage your 3GPP delegates to understand the implications

[1] Ericsson, “On the addition of enhanced ECN support in NR” Tdoc 3GPP TSG-RAN WG2 #98 R2-1707151

[2] Intel, “ECN and RAN-assisted codec adaptation” Tdoc 3GPP TSG-RAN WG2 #98 R2-1707014

# Recent activity

## ECN support in trill

- draft-ietf-trill-ecn-support (EXP)
- WGLC completed
- Will sit on hold due to normative ref to draft-ietf-ecn-encap-guidelines (BCP)
  - for when trill encapsulates a non-IP protocol

draft-ietf-tsvwg-ecn-encap-guidelines

# Status and Next Steps

- -09 revision edits queued
- Rewritten the section summarising relevant stuff from 6040update-shim
- Waiting for comments this week on 6040update-shim before committing the edits
  
- Otherwise, stable for some time
- WGLC milestone Sep 2017