

Encoding 3 PCN-States in the IP header using a single DSCP

[draft-ietf-pcn-3-in-1-encoding-04.txt](#)

Bob Briscoe, BT
Toby Moncaster, independent
Michael Menth, Uni Tuebingen
IETF-80 PCN Mar 2011



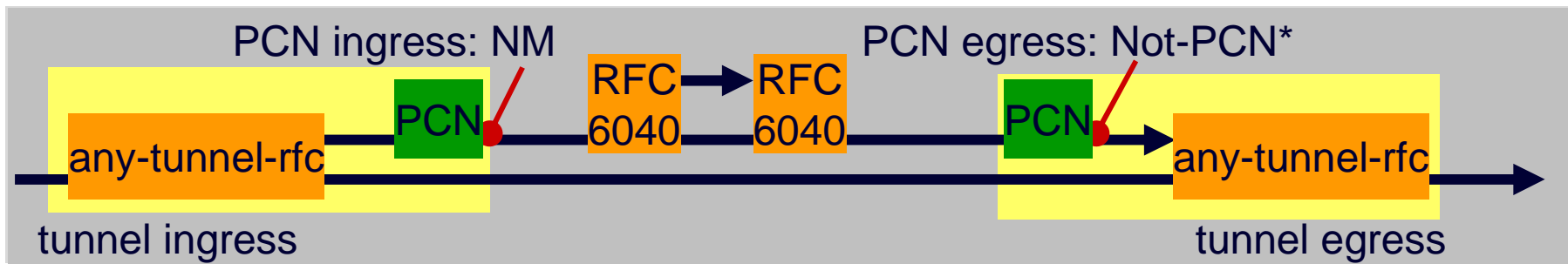
status

- Encoding 3 PCN-States in the IP header using a single DSCP
 - **mature draft:** [draft-ietf-pcn-3-in-1-encoding-04.txt](https://datatracker.ietf.org/doc/draft-ietf-pcn-3-in-1-encoding-04.txt)
 - **dependency:** RFC6040 (now Proposed Standard)
 - **intended status:** experimental → standards track
 - **exec summary:** very simple but complete draft
 - **immediate intent:** WGLC over, but some spare text needs a home
Consider implications of “updates 5696”

	DSCP	00	10	01	11
Baseline RFC 5696	DSCPn	Not-PCN	NM	EXP	PM
3-in-1	DSCPn	Not-PCN	NM	ThM	ETM

additional section: support for e2e ECN

- 4 approaches in baseline encoding app'x are imprecise:
 1. tunnel across PCN domain
 2. encode e2e ECN into an extended PCN encoding
 3. signal lack of ECN support to source (e.g. by drop)
 4. remark ECN-capable packets to a non-PCN-capable DSCP
- now clearer what to recommend
 - lay out all the possible cases
 - esp. document precisely how PCN uses a tunnel to protect e2e ECN
 - flag when updates or deprecates each of the above 4 approaches
- main point: e2e ECN safe if PCN placed logically within tunnel
 - any tunnel endpoint within 3-in-1 PCN domain must satisfy RFC6040



* experimentally, could leave PCN unchanged to trigger codec adaptation

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Q&A

