Registration Policy for TCP Header Flags
draft-kuehlewind-tcpm-flags-registry-00

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Background

- **RFC2780** specifies the registration policy for reserved TCP header flags as Standards Action.

- **RFC3168** created an IANA registry for these header flags and registered bit 8 (CWR) and 9 (ECE).

- [RFC3540] assigned bit 7 to the experimental ECN Nonce extension

- [RFC8311] recently declared [RFC3540] as historic and changed the assignment to reserved

- **RFC8311** does not provide any recommendation of the use of bit 7 and the TCP flags registry.
• Draft changes the registration policy of the registration to IETF Review
  • New TCP mechanisms that could use the remaining reserved flags will likely be first specified as experimental
  • Not noting any of those experiments in the registry would undermine the purpose of having a registry.

• However, care must be taken!
  • Any experimental extension SHOULD discuss the scope of the experiment and potential failure cases
  • Deployment should be evaluated some years after the assignment to an experimental extension to de-assign or permanently assign
Other options

• Only change registration policy for bit 7 (or one bit at a time)
• Publish more extension as PS -> AccECN as PS
• Temporary assignment (see RFC2780)
• Don’t change assignment (keep at reserved) / only add a comment?