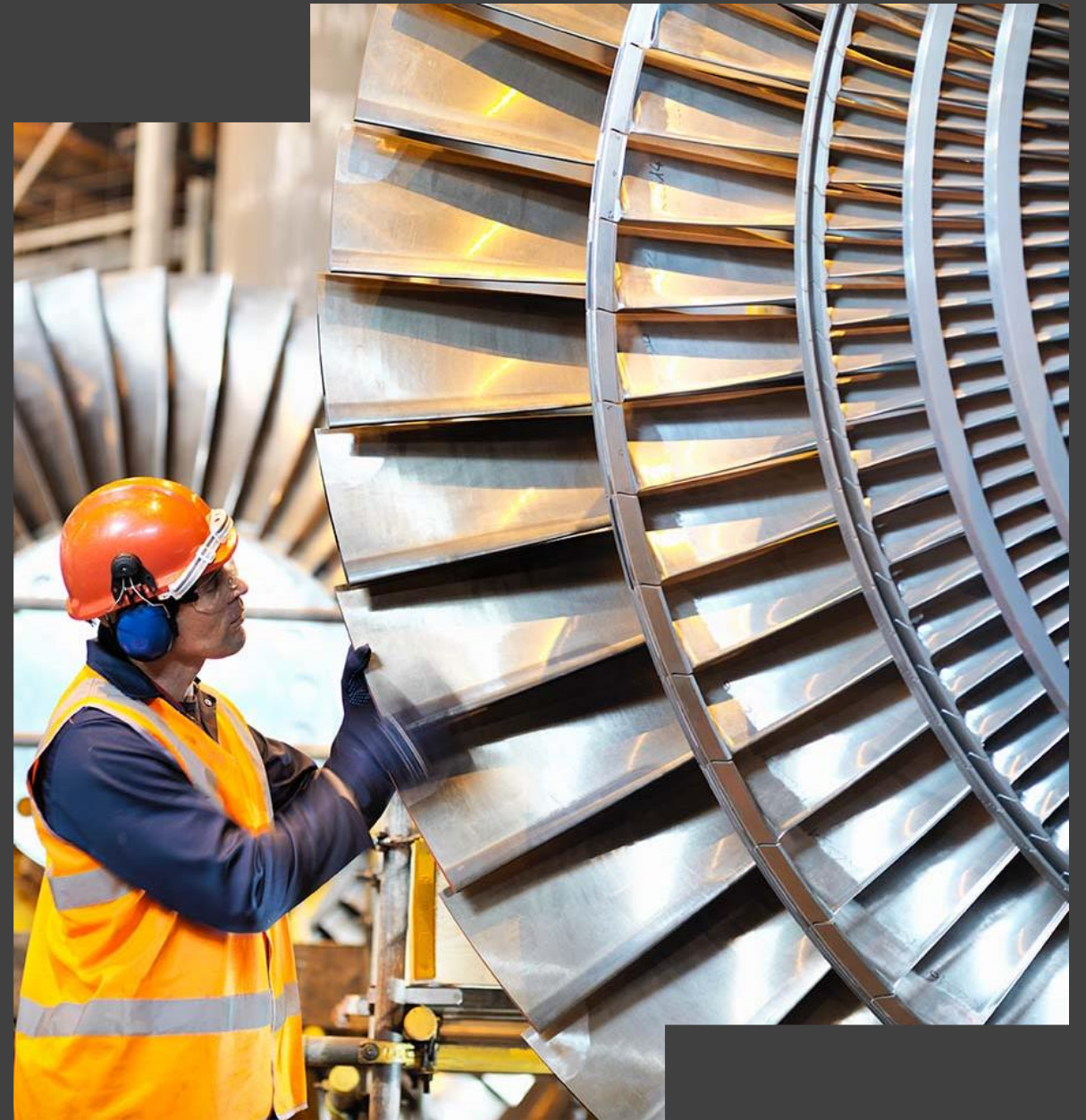


ACCURATE ECN

IETF 120 VANCOUVER

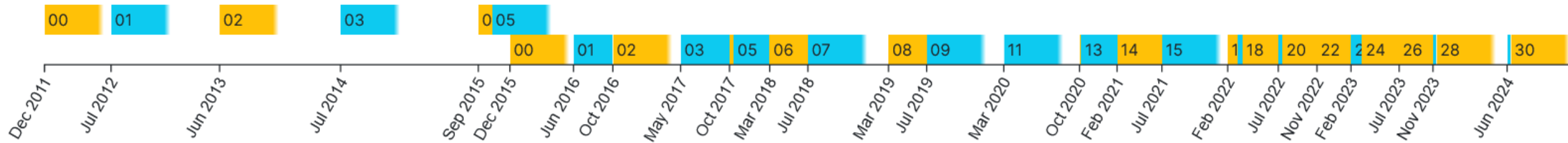
Bob Briscoe, Independent
Mirja Kühlewind, Ericsson
Richard Scheffenegger, NetApp

channelled by Michael Tüxen, TCPM Chair



Recent draft history

draft-ietf-tcpm-accurate-ecn-30



- WGLC
- 28 → 29: 2024-06-25
 - Hiatus due to unavailability of authors
 - Update to differentiate between receive and transmit paths in TCP offload processing (Feedback received in WGLC)
- 29 → 30: 2024-07-07
 - Improve and clarify wording around the same topic
- Other: 2024-07-11
 - IANA renewed preliminary assignment of option numbers
 - 172 / 0xAC
 - 174 / 0xAE

AccECN implementation status

- Linux
- FreeBSD
- MacOS / iOS
- Wireshark
- Tcpdump (WIP)

- Ongoing Interop-Labs for L4S – featuring Accurate ECN in some compatibility tests

Document updates since last IETF

- Latest update (section 3.3.4) based on experience with AccECN on TSO hardware
- NICs with TSO and ECN support usually feature bitmaps for masking TCP header flags between first, middle and last segment
- Configurable only globally on the NIC, not per-flow
- Challenges when running RFC3168 ECN and AccECN simultaneously
- One implementation works around this issue by **NOT** falling back to RFC3168 ECN if AccECN handshake is unsuccessful.

THANK YOU