# Side meeting on QUIC for high BDP networks

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# Note well

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- https://www.ietf.org/privacy-policy/ (Privacy Policy)

# Objective of the workshop

- Internet drafts:
  - draft-kuhn-quic-4-sat
  - draft-kuhn-quic-0rtt-bdp
  - draft-ietf-quic-recovery
  - draft-fairhurst-tsvwg-cc
- (Many) presentations at IETF :
  - Satellite Internet Performance Measurements, Jörg Deutschmann, Kai-Steffen Hielscher, Reinhard German International Conference on Networked Systems 2019 (NetSys 2019)
  - Google QUIC performance over a public SATCOM access Ludovic Thomas, Emmanuel Dubois Nicolas Kuhn and Emmanuel Lochin International Journal of Satellite Communications and Networking
  - Measuring QUIC Dynamics over a High Delay Path. MAPRG – IETF105. Gorry Fairhurst
  - QUIC vs PEP Over Satellite. PANRG – IETF 105. John Border
  - QUIC Over In-sequence Paths with Different Characteristics. PANRG – IETF 105. Nicolas Kuhn
  - Losses in SATCOM systems: identification and impact. MAPRG – IETF 106. Nicolas Kuhn
- The objective of this workshop:
  - gather people interested in QUIC for high BDP networks
  - discuss the best way towards better end user experience

# Agenda

- High BDP : focus on SATCOM challenges for QUIC
- Challenge : SWOT analysis of QUIC in SATCOM
- What are the problems ?
  - One list of issues
  - Short presentations on problems we know (e.g. loss, flow control, …)
- Options to go forward ?
  - Class 0 – solved by others : What is actually being solved in other places ?
  - Class 1 - Default for QUIC v2 : Are there more fundamental changes in the protocol ?
  - Class 2 : Guidance for QUIC in high BDP : What are the things we can tune ?
  - Class 3 : Deploy explicit proxy
- Any other activity on QUIC over SATCOM we are/were not aware of ?
  - With QUIC-tunnels in the VIBeS
  - Other ?
- Open questions for discussion

# Open questions

- Who is in the room ?
- What are the space you are interested in ?
- Do you want to contribute ?
- Should we do it again ?
- Use the etosat list