



ETHERNOVIA

VIRTUALIZING VEHICLE COMMUNICATION



IEEE P802.1DG

General update and future schedule planning

2023-01-17

IEEE 802.1 Interim Meeting

Does anyone want to provide a contribution?

- Security?
- Redundancy? (FRER)
 - Safety?
- ... ???

- Please take a look here for inspiration:
 - <https://www.ieee802.org/1/files/public/docs2019/dg-finn-auto-prof-outline-0119-v02.pdf>

Less is More!

- Reduce content along the lines of:
 - <https://www.ieee802.org/1/files/public/docs2022/dg-turner-ModuleProfiles-0422-v02.pdf>
- Remove explanatory text, where it is not related to requirements to reduce comments on informative text (lessons learned from 60802)
- MACsec now in <https://www.opensig.org/tech-committees/tc17/>
- We made good progress on Qbv (modes), Qci, CB (stream ident.), and Qcr (ATS) - for Editor to detail
 - Align with new Autosar Release R22-11 (Dec. 2022)
 - (Document ID 656: AUTOSAR_SWS_EthernetSwitchDriver - https://www.autosar.org/fileadmin/standards/classic/22-11/AUTOSAR_SWS_EthernetSwitchDriver.pdf)
 - Update from Maintenance item #0343 (<https://www.802-1.org/items/455>)
- More details needed on use of Qav (require connection to Qci for all traffic)
- Align with <https://www.opensig.org/tech-committees/tc11/>
- Comparison of Latency calculations (CBS: Q-Annex L & BA, ATS: Q-Annex V).
- **Open:** How to deal with Time-Synchronisation?
 - Alignment with P802.1DP and P60802 is increasing, but diverging from IEEE Std 802.1AS and IEEE 1588

Timeline

- Changed to a bi-weekly schedule (every other week)!
- **Jan. 17th:** Interim - today
- Next calls: ~~Jan. 24th~~, Feb. 7th, Feb. 21st, ~~Mar. 7th~~ (will cancel if no contributions!)
- Mar. 13th-17th: Plenary (Editor F2F) - prepare PAR extension!
 - P802.1DG PAR&CSD expiration: Dec. 31st 2023
- (Mar. 21st-23rd: Automotive Ethernet Congress and TSN Workshop)
- **April: Draft V1.5 release and Voting (min. period?)**
- May 19th 2023: IEEE802.1 Interim, Helsinki - Editor F2F
 - Comment Resolution Draft V1.5
- July 9th 2023: IEEE802 Plenary, Berlin - Editor F2F
- November 12th 2023: IEEE802 Plenary, Hawaii - Editor virtual

Model Stack

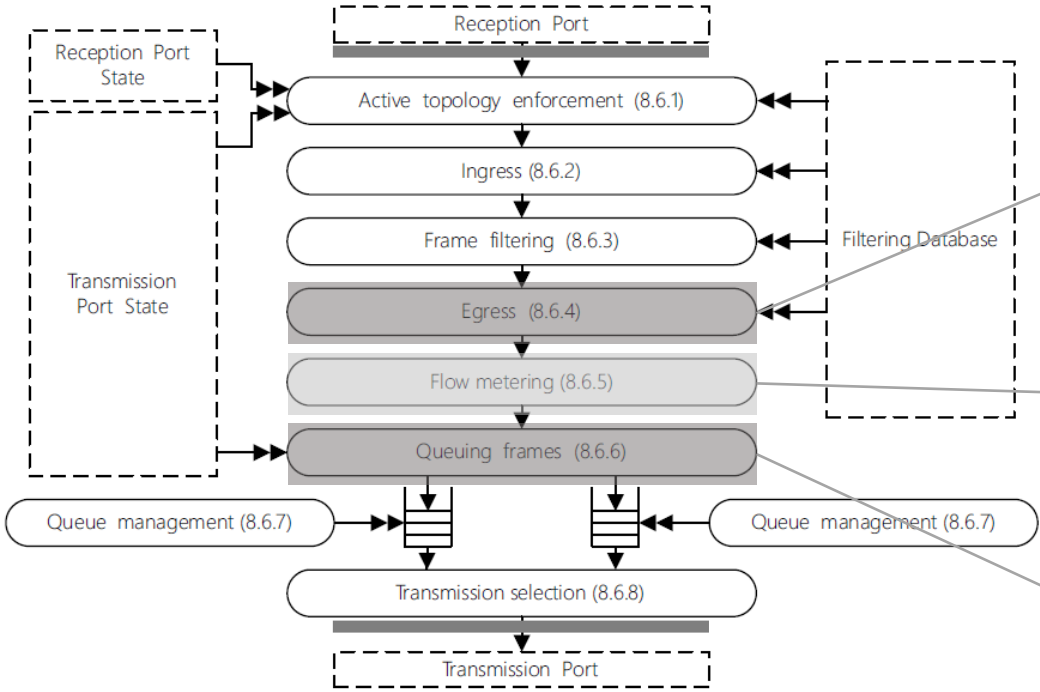


Figure 8-12—Forwarding process functions

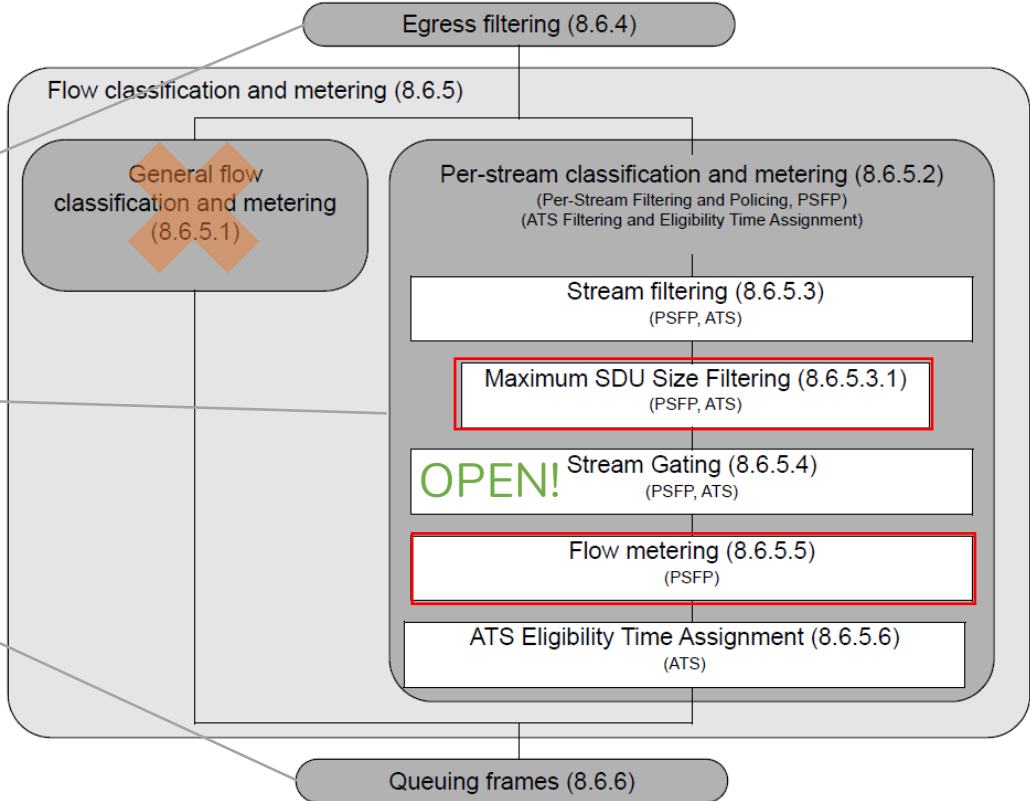
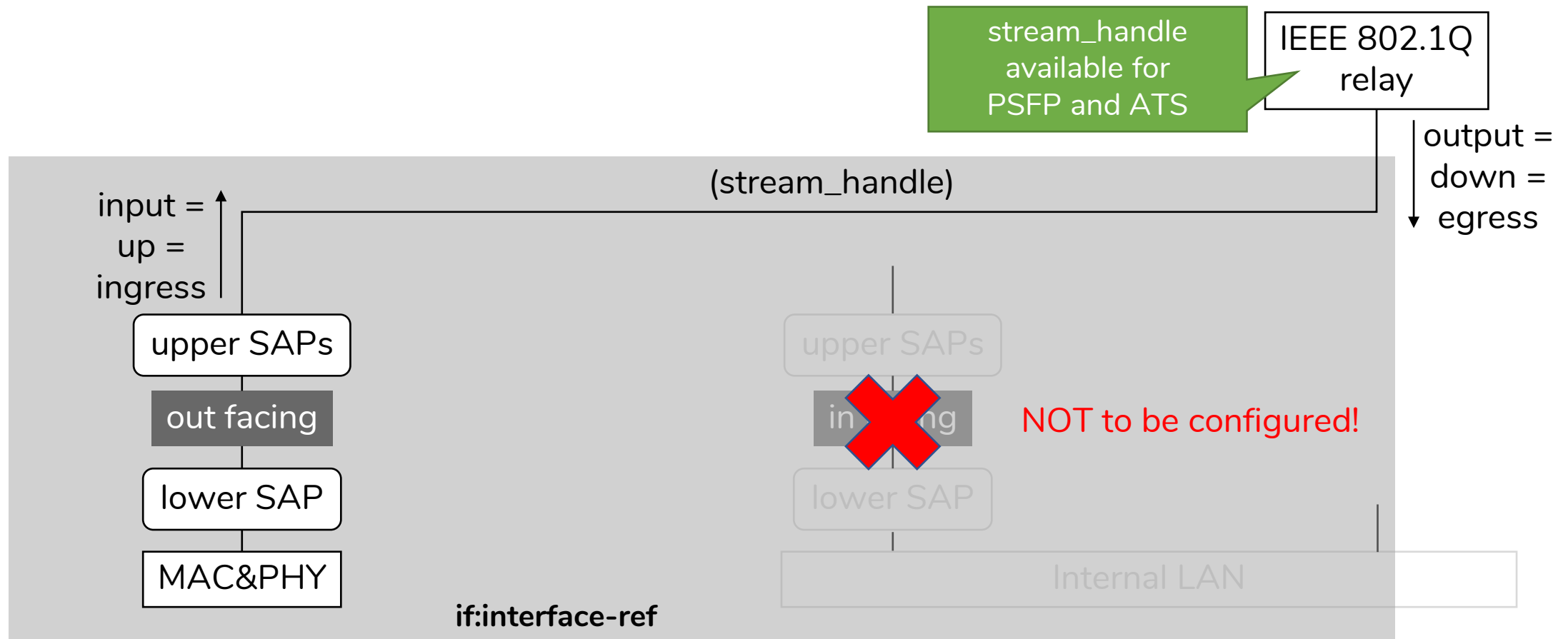


Figure 8-13—Flow classification and metering

— (only!) OUT-facing Stream-Identification (IEEE Std 802.1CB)

Exclude in-facing Identification (from IEEE Std 802.1CB)



Latency Discussion

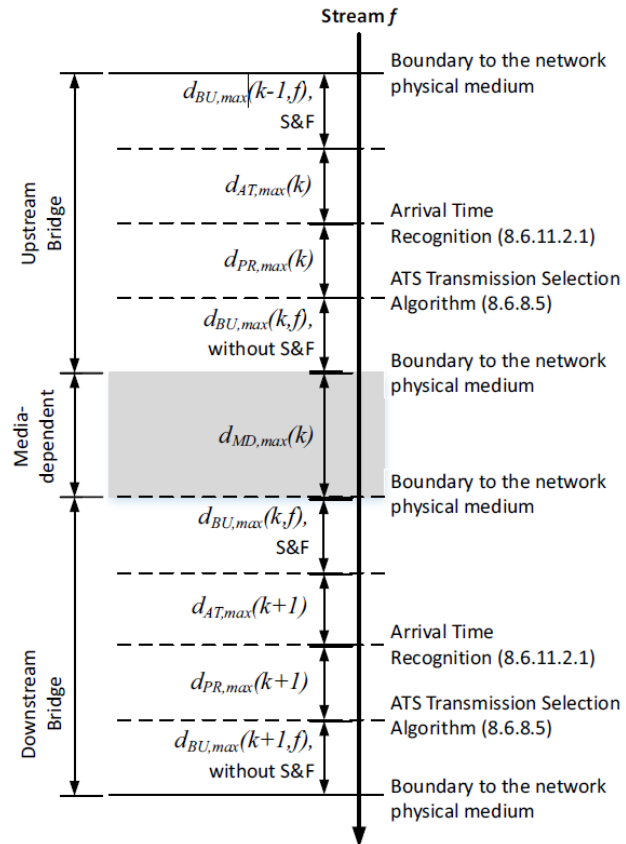


Figure V-1—Path of frames along a single hop with index k with two Bridges

This ATS Model can be applied “in principle” to CBS for better comparison.

Separate the Shaper from the Frame Identification!



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THANK YOU

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