



P802.1DP Editor's Update | January 2022

P802.1DP Editors Update

Abdul Jabbar
GE Research

Objective



Editor's Update

Progress Review in anticipation of draft 0.1

DP Committee Work



- **Detailed use cases captured**
<https://www.ieee802.org/1/files/public/docs2021/dp-Jabbar-et-al-Aerospace-Use-Cases-0321-v06.pdf>
- **Traffic Characterized**
<https://www.ieee802.org/1/files/public/docs2021/dp-Jabbar-et-all-Aerospace-Traffic-Characterization-0421-v02.pdf>
- **Unique aerospace requirements captured**
<https://www.ieee802.org/1/files/public/docs2021/dp-zaehring-Introduction-to-Aerospace-Network-Certification-JAR25-1309-CS25-0321-v01.pdf>
- **Two profile approach proposed**
<https://www.ieee802.org/1/files/public/docs2021/dp-Jabbar-two-profile-approach-0521-v01.pdf>
- **Specification outline proposed**
<https://www.ieee802.org/1/files/public/docs2021/dp-jabbar-profile-outline-0721-v02.pdf>
- **Profile features discussed**
Shaping, redundancy, policing

Functions for Aerospace Profiles



Functions	Asynchronous Profile	Synchronous Profile
Time Synchronization	None	802.1 AS – 2020
Egress Traffic Shaping	Credit Based Shaper (Qav)/ Asynchronous Traffic Shaper (Qcr)?	Credit Based Shaper (Qav)/ Asynchronous Traffic Shaper (Qcr)? Time Aware Shaper (Qbv)
Redundancy	Frame Replication and Elimination (CB)	Frame Replication and Elimination (CB)
Ingress Policing	Per-Stream Filtering and Policing (Qci)	Per-Stream Filtering and Policing (Qci)
Configuration	UNI (Qcc-Fully centralized), Yang models (Qcw, CBcv)	UNI (Qcc-Fully centralized), Yang models (Qcw, CBcv)
Management and Monitoring	Required error, fault, and performance metrics	Required error, fault, and performance metrics
Forwarding	Per-stream forwarding	Per-stream forwarding
Stream Separation	Stream identification, transformation, and separation	Stream identification, transformation, and separation

Next Steps



- Address remaining features
Calling for contributions
- Need proposal to address options and gaps.
Calling for contributions
- Editor's draft 0.1