



Aerospace Time Sync | April 2023

PTP Domain 0 for Aerospace

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Objective



- **Review amendments to 802.1AS-2020 in progress**
- **Discuss impact to aerospace use cases**
- **General awareness**

Ongoing Amendment to 802.1AS-2020 via P802.1ASdm



- Makes BMCA optional (Changes to conformance Clause 5.4.1)

<https://www.ieee802.org/1/files/private/asdm-drafts/d1/802-1ASdm-d1-0.pdf>

- Makes Domain 0 optional (Changes to relevant sections)

<https://www.ieee802.org/1/files/private/asdm-drafts/d1/802-1ASdm-d1-0-pdis-v04.pdf>

Aerospace Use of 802.1AS-2020 as amended by P802.1ASdm



- Use multiple domains for fault-tolerant time distribution using any timescale (e.g. ARB)
- External port configuration to enforce static time distribution trees for each domain
- Aerospace implementations do not need to support BMCA and other domain 0 specific requirements – thereby reducing complexity and code for certifiable implementations
- Thanks to the editor and contributors to P802.1ASdm

Disclaimer: P802.1ASdm is a draft standard and not an approved standard.

