

# TAS Scheduling for Real-Time Forwarding of Emergency Event Traffic in TSN

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## 1 Introduction

Industrial systems that utilize advanced network technologies have been developed in various fields such as audiovideo, smart factories, and automotive networks, to provide differentiated quality of service (QoS) to different applications and services. [1]

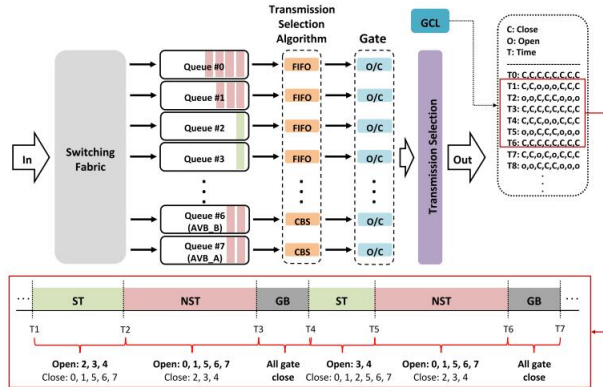


Figure 1: IEEE 802.1Qbv Time Aware Shaping

## 2 Conclusion

In this paper, we have shown that unscheduled high-priority emergency event traffic may induce significant delay and jitter to scheduled traffic in IEEE 802.1 time-sensitive networks, and suggested an effective enhancement to the time aware shaper scheduling algorithm.

## References

- [1] J. Lee and S. Park, “Time-Sensitive Network (TSN) Experiment in Sensor-Based Integrated Environment for Autonomous Driving,” *Sensors*, vol. 19, no. 5, p. 1111, 2019.