

Call for Submissions

Conference on Time Sensitive Networks / Technology and Applications (TSN/A)

For Cyber Physical Systems, Industrial Internet of Things, Real-Time Audio & Video,
and Intelligent Transportation Systems

The TSN/A Conference is planned to take place in-person
on 28 – 29 September 2022 in Stuttgart, Germany.

The TSN/A Conference is jointly organized by **Avnu Alliance** in Cooperation with the German trade publications **Computer&AUTOMATION** and **Elektronik automotive**.

We are pleased to issue a call for papers for the seventh annual technical conference focused on Time-Sensitive Networks and Applications to be held in-person on **28 – 29 September 2022**. This year's conference focuses on "TSN in Reality". Therefore, we will give special consideration to proposed talks that describe current or planned deployments of TSN, including multi-vendor testbeds that prove specific use-cases. We also will provide an insight to current and emerging use cases, standards, experiments, best practices, and technologies related to time and/or mission critical applications supported by converged networks. Application areas include but not limited to Cyber Physical Systems, Industrial Internet of Things, Real-Time Audio & Video, Aerospace, and Intelligent Transportation Systems.

Please submit an abstract at www.tsnconference.de by **12 May 2022** after reviewing the Speaker Guidelines and Milestones below. We look forward to your submission! If you have any questions, don't hesitate to reach out to Katrin Scheinig at kscheinig@weka-fachmedien.de.

Thank you,



Kevin Stanton

Intel Corporation
Conference Co-Chair



Meinrad Happacher

Computer&AUTOMATION
Conference Co-Chair



János Farkas

Ericsson
Conference Program Chair

Powered by

**computer &
automation**

**Elektronik
automotive**

In-Cooperation with



Please submit your abstract at www.tsnconference.de



**Extended Deadline
12 May 2022**

Speaker Guidelines

All speakers should keep in mind that they will be presenting to experts across a broad spectrum of industries and therefore the presentations must provide a sufficiently succinct background of the topic before presenting the main idea. Product-focused "sales pitches" will not be allowed.

By submitting an abstract, you agree that you are committed to presenting at the technical conference if your abstract is selected by the committee. The submission also indicates that you are willing to give your presentation in-person unless unforeseen events make that not possible.

All selected speakers must abide by the milestones listed in order to participate.

The language of the conference is English.

Possible Topics

Note: Submissions around bringing TSN to reality, e.g., on deployments and deployment-close experiments are encouraged. Submissions on further topics are also welcome.

- Deployment and testbed experiments; best practices
- Emerging standards for wireline and wireless Time-Sensitive Networking (TSN)
- TSN - advances in the silicon-market
- Influence of TSN on transforming Industrial Automation
- Use of TSN in Industrial Automation
- Heterogeneous TSN Networks
- Migration to TSN networks
- Use of 5G URLLC in industrial applications / interworking with TSN
- TSN and higher layer application Protocols (OPC UA/etc.)
- Edge/Fog-Computing in combination with TSN, OPC UA, and 5G
- TSN for automotive in-vehicle networks with functional safety
- Requirements for automated driving / autonomous vehicles
- TSN for aerospace; use, requirements, and expectations
- Current Deployments of Real-Time AVB or TSN in production installation
- Emerging real-time audio/video over Ethernet with AVB/TSN
- Security and TSN in distributed real-time systems
- Safety-Critical distributed systems over TSN
- TSN support in the Operating System (e.g., Linux+PreemptRT, RTOS)
- Open Source software stacks for TSN protocols
- Timing guarantees within computing systems
- Interworking of IEEE 1588 / PTP Profiles in Time-Sensitive Applications
- Combination of TSN with DetNet
- Network hierarchy provided by TSN and DetNet

Speaker Milestones

- 12 May 2022 – Deadline Call for Submissions
Data needed for submission:
 - ✓ Abstract (not-to-exceed 100 words – for use in review and program guide)
 - ✓ 50-word bio from each speaker
- June 2022 – Abstracts selected, and speakers notified
- 1 September 2022 – Final presentation due