

## 1 Topics

We welcome

1. innovative contributions at the interface between science and practice (at least practically oriented tested) and
2. needs for innovation

in modeling and procedures (methods, processes, algorithms) of railway operations (planning and execution).

Submissions should address one of the following topics:

- Measures to achieve more capacity in existing railway infrastructure
- Measures to secure capacity during construction phases (during the year)
- Experience with automation, digitalization and innovative technologies in operational planning and execution

These may cover one the following specific topics, but are not limited to:

- increasing punctuality in national / international long-distance railway traffic
- dealing with capacity bottlenecks in nodes
- (during the year) operational planning during construction phases of ETCS L2
- digitized operational planning of construction phases to reduce process throughput times
- customer-centered and operation-optimized possession times planning
- timetable modification and rescheduling during the year
- CTMS-supported timetable adjustments for future ETCS technologies
- Timetable Redesign (TTR) for smart capacity management of the RailNetEurope (RNE)
- Experience with automation / digitalization in operational planning and execution, e.g. in the areas of ATO, introduction of TAF/TAP TSI, further development of the operational-technical target image from 2024, optimization of the railway undertaking (RU) – railway infrastructure manager (RIM) interfaces
- Experience with innovative technologies (e.g. AI) in operational planning and execution
- Measures with an impact on capacity when implementing ETCS L2
- Measures with an impact on capacity supporting the brake test in railway freight transport
- Automation of operational documents during the year

## 2 Submission of contributions and review

For all contributions, an abstract (max. 700 words without figures, abbreviations and references) must first be submitted to [symposien@verkehr.tu-darmstadt.de](mailto:symposien@verkehr.tu-darmstadt.de) by 31.03.2024 using the template (note format and content structure). The abstract must indicate which format is planned for submission of the full contribution in the next step after acceptance of the abstract. After possible acceptance of the abstract, the full contribution must be submitted to the above e-mail address by 20.05.2024. Contributions are possible in German and English.

Possible formats for submitting innovative contributions are:

- Scientific paper (focus: scientifically derived and at least practically oriented tested innovations) or business paper (focus: practical experience with an innovation)
  - Short paper 4-8 pages incl. figures and references (submission as PDF), 15 minutes presentation at the conference plus discussion
  - Long paper, 10-20 pages incl. figures and references (submission as PDF), 15 minutes presentation at the conference plus discussion
- Poster (DIN A1, incl. method, application and results, submission as PDF)
- Exhibits (submission as photos / short video incl. space requirements and if applicable requirements for fire protection or other infrastructure required for the exhibition)

Possible formats for submitting needs for innovation are:

- Problem pitches, 5 minutes short presentation or poster (problem pitches are potential topics in the CfC of the ETK 2025, submission as poster as PDF or short presentation)
- Discussion topic for a round table), 60 minutes of discussion (submission as PDF, inkl. key questions for the discussion)

The following requirements are evaluated particularly in the review:

content requirements	formal requirements
<ul style="list-style-type: none"><li>- railway operations,</li><li>- interface between science and practice,</li><li>- tangible results / prototypes or need for innovation</li><li>- no product presentation</li></ul>	<ul style="list-style-type: none"><li>- new / not yet presented at an earlier date,</li><li>- correct,</li><li>- reproducible (except needs for innovation)</li><li>- in one of the specified formats</li></ul>

The submitted contributions must fulfill all of these requirements.

The best short and all long papers will be published in the conference proceedings.

### 3 Important dates

- abstract submission: by 31.03.2024
- notification of acceptance (if applicable): by 22.04.2024
- full contribution submission: by 20.05.2024
- (if applicable) paper presentation submission: by 17.06.2024
- conference: 19th June, 13 p.m. and 20th June 2024
- publication of conference proceedings: expected July 2024

### 4 Registration and contact

**Registration:** At least 1 person per contribution must be registered to participate and present the contribution in the ETK. The reduced registration fee for presenters (and up to two accompanying persons) is 300€ per person, venue of the conference is the Georg-Christoph-Lichtenberg Haus Darmstadt.

**Contact us:** [symposien@verkehr.tu-darmstadt.de](mailto:symposien@verkehr.tu-darmstadt.de)

**Further information:** [www.verkehr.tu-darmstadt.de/etk](http://www.verkehr.tu-darmstadt.de/etk)