



TECHNISCHE
UNIVERSITÄT
DARMSTADT



The Impact of Crises on Critical Infrastructure

INTERNATIONAL CONFERENCE

26 September 2024

GEORG-CHRISTOPH-LICHTENBERG-HAUS,
DARMSTADT, GERMANY

Call for Abstracts

Submission deadline	April 30, 2024
Word count	150 – 300
Language	English
Participation fee	no fees apply

1 Concept of the conference

Crises can come in different forms and dimensions and serve as stress tests for critical infrastructures. The world has seen various crises in the past decade, such as pandemics, wars, droughts, and forest fires and resulting function failures. These crises have affected, transformed, and reshaped critical infrastructures, influencing how they are perceived and discussed.

Crises play a vital role in defining the meaning and understanding of criticality and vulnerability, and they can lead to transformation processes in critical infrastructures. Besides, crises not only reveal vulnerabilities but also require responsibility, trust, and transformation processes. These terms are re-evaluated in the context of trust in technology, security, humans, and critical infrastructures in general. Who is responsible, and who must trust?

The KRITIS research training group has an interdisciplinary socio-technical perspective and aims to address such questions at the conference. The event intends to bring together experts from different fields, such as philosophy, political science, civil engineering, computer science, urban and spatial planning, architecture, sociology, and history, as well as practitioners from public administration and infrastructure operators. Different kinds of crises, such as pandemics and any other type of crisis, and their impact on infrastructures on different levels, as well as multiple approaches on how to define a crisis, are the main interests of the conference. Therefore, we appreciate it if contributions also address the understanding of crises regarding their approaches.

The conference aims to encourage interdisciplinary discussions about vulnerability, responsibility, and trust, examining their impact on critical infrastructures after crises and questioning whether any changes or transformations have occurred.

2 Keywords

Contributions may focus on, but are not limited to:

Vulnerability

The concept of vulnerability is especially important in the context of crises as it often becomes only visible thereby. It is, for example, about the vulnerability of critical infrastructures, which is related to their criticality, of humans as well as techno-social systems.

We are particularly interested in the following key questions:

- What does vulnerability mean in the context of crises?
- And how does it become visible?
- How do crises like a pandemic show that we are all vulnerable?
- And are we vulnerable in the same way?
- What does vulnerability mean for the safety and stability of critical infrastructures

Trust & Responsibility

Trust is essential in our daily connected techno-social lifeworld. We need to trust in other people and their decisions, but also in systems as well as in technologies. Closely related to trust is the question of responsibility.

We are particularly interested in the following key questions:

- Who can and should be responsible in complex situations, especially during crises?
- How can we trust in systems that are black boxes for us?
- Is the understanding of trust and responsibility changing during or as a result of crises?
- Can responsibility be handed over to autonomous systems?
- Or should there always be a human as a responsible decision-maker?

Change & Transformation

Change & Transformation focuses on how critical infrastructures adapt to new challenges and evolve. It delves into the impact of technological advancements, policy shifts, and socio-economic factors on these systems, highlighting their resilience and the need for innovative strategies for sustainable transformation.

We are particularly interested in the following key questions:

- What types of changes (bouncing backwards & forwards) are shown through crises?
- Are there any kinds of transitions regarding the impacts of crises on critical infrastructures?
- Are crises like the pandemic changing our understanding of crisis?
- How do emerging technologies drive transformation of critical infrastructures?
- What role do policy changes play in the sustainable evolution of critical infrastructure?

3 Keynote lectures

We are happy to announce that the conference will feature three keynote lectures by **internationally renowned** scholars, namely:



Keynote Speaker 1

TBA

TBA

Topic of the speech: TBA



Keynote Speaker 2

TBA

TBA

Topic of the speech: TBA



Keynote Speaker 3

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TBA

Topic of the speech: TBA

4 You are welcome to join!

Submit your abstracts in English language with **150 – 300 words** before **April 30, 2024, 23:59 CEST** to crises@kritis.tu-darmstadt.de.

Have nothing to present? Register as an attendee on <https://kritis.gitlab.io/crisesconf2024>. All forms of participations are **free of charge**.

5 Contacts

If you have any questions, there are multiple ways for you to get in touch with us:

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