

Call for Abstracts

Beyond short-termism: Strategies and perspectives for the long-term governance of socio-technical change

TATuP Special topic in issue 34/2 (2025)

Submit your abstract by 12 August 2024

Research interests. This TATUP Special topic aims to deepen our understanding of how societies can effectively navigate the challenges posed by socio-technical transformations by developing forward-thinking, socially equitable, and environmentally sustainable governance practices. In particular, we invite authors to explore the multiple temporal dimensions inherent in long-term governance (LTG) approaches, highlighting the critical role of time, timing, and temporality in shaping decision-making processes. Furthermore, we would like to emphasize the role of technology assessment (TA) in informing such processes to better address persistent challenges and emerging opportunities in rapidly evolving technological landscapes. We welcome interdisciplinary and transdisciplinary contributions, ranging from conceptual and theoretical analyses to empirical case studies.

Background. Climate change, environmental pollution, nuclear waste management, and unsustainable production and consumption all share the common trait of being long-term challenges that often lead to the implementation of novel technological solutions. This long-term nature stems from their complex and uncertain character, their potential for severe consequences, and the demanding problem-solving paths. Indeed, effectively addressing these challenges requires a form of governance that transcends short-sighted visions and short-term mechanisms.

The concept of LTG, as introduced by Siebenhüner and colleagues (2013; see also Sprinz 2009), is to be understood as the most forward-looking and adequate political handling of large-scale, targeted change processes. Various approaches in the literature have explored this topic from different angles, including risk governance (Renn 2008), earth system governance (Biermann 2007), and transition studies (Geels and Schot 2007; Kemp et al. 2007; Loorbach 2010; Rotmans et al. 2001). LTG typically encompasses strategies, policies, and practices that prioritize strategic decision-making and future planning and address the integration of multiple institutional levels (Czada 2016; Jordan et al. 2015). Moreover, it requires integrated, comprehensive, and sustained efforts that combine technical,

organizational, social, legal, and economic dimensions while considering issues of equity, especially intergenerational justice (Sovacool and Dworkin 2015; Tremmel 2006). Ideally, an LTG approach is anticipatory, flexible, and adaptive and capable of addressing the challenges of changing structures and agency over time, while maintaining a focus on the chosen solution(s) (Bornemann and Strassheim 2019; Boston 2017; Voß et al. 2009). This calls for an approach that is sensitive to path dependencies, which, while sometimes supporting the emergence of new socio-technical systems, can also significantly hinder change (Smith and Raven 2012; Turnheim and Geels 2013).

In this call for abstracts, our focus is on understanding the multiple temporal dimensions inherent in LTG, recognizing time, timing, and temporality as fundamental aspects. For instance, the notion of "timeprints" (Adam and Groves 2007; Frenay and Parotte 2022) illustrates how the past affects the scope and impact of current decisions, that the pace of technological developments significantly affects decision-making processes, and that democracies often grapple with decisions that entail short-term costs but promise long-term benefits. Furthermore, in the realm of TA, the concept of *'time*-termism' is of fundamental importance, as TA provides early guidance on whether and how to proceed with the development and adoption of new technologies and on how to deal with their consequences. While rapidly evolving technologies often lead to quick fixes and require immediate assessment by policy makers, long-term transformations of socio-technical systems raise questions that demand continuous forms of assessment.

Themes to be explored in this Special topic

- Long-termism in decision-making practices: How do different time horizons (short, medium, and long-term) affect the policy cycle stages of problem definition, policy formulation, implementation, and evaluation? What are the trade-offs and challenges associated with balancing urgent short-term needs with long-term goals? How can temporal considerations be incorporated into governance frameworks aimed at socio-technical change to ensure sustainable and equitable outcomes?
- *Technological transformation and governance structures*: How does the 'long now' of certain technologies and related infrastructures (e.g., AI and quantum computing, energy grids, biotechnology, power plants) shape the temporal dimensions of governance, e.g., by creating path dependencies?
- *Contextual aspects of governance:* How do local cultures and future visions shape LTG processes and structures?
- *Methods and tools*: What approaches, methods, and tools can facilitate foresight and planning in the context of LTG? How can scenario building, foresight techniques, and long-term thinking contribute to effective practices in this area?
- *TA and policy advice:* To what extent should existing TA approaches and techniques be modified to analyze continuously evolving socio-technical systems? How can TA contribute to the design of governance structures aimed at steering long-term socio-technical change?
- *Ethical considerations*: What ethical considerations arise when making decisions with longterm consequences? How can LTG deal with ethical considerations, e.g., related to intergenerational justice, accountability, and the precautionary principle?

Special topic editors

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Submissions

- We encourage the submission of manuscripts in English, but German versions are also welcome.
- Please send your abstract by e-mail to <u>redaktion@tatup.de</u> by **12 August 2024** at the latest.
- Length of the abstract: max. 1.5 pages.
- The editorial office will contact the author submitting the abstract.
- Please state full names, e-mail addresses, and institutional affiliations of all co-authors.

| 12 August 2024 | Submit your abstract |
|------------------|---|
| September 2024 | Notification of invitation or rejection to submit research articles |
| December 2024 | Deadline for submission of research articles, followed by peer review |
| February 2025 | Feedback from the reviewers, followed by revision by the authors |
| March 2025 | Submission of the revised research articles |
| March/April 2025 | Further revisions, if necessary |
| May 2025 | Data transfer to publishing house |
| July 2025 | Publication (print and online) |

Editorial process outline

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