

## *Flux Journal*

### *Special Issue*

## **Landholdings and Infrastructure**

*Issues, practices and tools of network operators managing and developing their properties*

### *Call for papers*

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**Land is a critical dimension in the development and material transformation of infrastructure. While the land and real estate issues associated with networks have been the subject of recent analysis, they remain overlooked in urban studies. This special issue of *Flux* aims to bring together contributions examining the land and real estate practices of network managers, whether public or private, across multiple sectors (transportation but also waste management, energy, water, logistics, etc.).**

The expansion and operation of networks generate significant demand for land and real estate. Network operators – ranging from states and local governments to private companies –, hold substantial land and real estate portfolios that facilitate the expansion of infrastructure and the delivery of related services. These portfolios are built through diverse processes, including voluntary acquisitions, expropriation, or land capture, all of which depend on territorial-specific frameworks, stakeholders, and tools (Bon, 2017; Nguyen et al., 2018).

Beyond land issues associated with network development, recent studies highlight changes in the management of infrastructure operators' properties, transitioning from land retention and preservation to active management and development. These changes manifest in rising practices such as the disposal of 'surplus' land—plots deemed non-essential for network service delivery —, the development of real estate projects on or near infrastructure, and the rental of properties to generate additional income. Similar to other public property owners (Christophers, 2017; Artioli, 2021), network operators increasingly view their land not only as a production resource or network support but also as an asset to be leveraged and a source of financing. As shown by F. Adisson (2018), these shifts are closely linked to state transformations, the diffusion of New Public Management doctrines, sectoral reforms, network liberalization measures, and austerity policies requiring operators to seek alternative funding sources for their networks. Thus, land development and real estate activities increasingly contribute to the revenues of network operators in relation with infrastructure privatization and financialisation (O'Brien et al., 2019a).

The use of land and real estate properties as a funding mechanism for networks is not new. Examples from Japan (Aveline, 2003) and Hong Kong (Aveline-Dubach & Blandeau, 2019) underscore the long-standing significance of land value capture practices among private railway companies. These practices are now being adopted by a broader range of operators, as evidenced by studies on railway companies (Adisson, 2015; Riot, 2015; Bon, 2021), ports (Magnan, 2015), and airports (Halpern, 2011). These practices significantly reshape the internal operations of infrastructure managers, transforming them into "*ensembliers urbains*" (Lorrain, 1995) through measures such as creating real estate subsidiaries, conducting asset inventories, utilizing financial tools to assess asset value (Adisson, 2018), hiring new personal, forming partnerships with major real estate companies, and using external resources. The growing importance of land-related issues in

infrastructure management is further supported by the emergence of new intermediaries specializing in land matters, who act on behalf of network operators.

These developments have implications for infrastructure financing and territorial transformations, though the topic remains little explored. Three key consequences can be identified. First, the increasing reliance on land-based financing tools undermines the economic stability of network operators by making them partially dependent on fluctuations in land and real estate markets (O'Brien et al., 2019). Second, the growth of land and real estate activities strengthens the role of network operators in territorial governance, positioning them as key players in urban development. Finally, these processes also affect the material transformation of urban spaces, exemplified by the development of hotels, logistics zones, or shopping centers within airport platforms; major urban projects on former railway sites or above transport infrastructure; the commercialization of stations; and the redevelopment of port waterfronts. The socio-spatial implications of this increasing commodification of network operators' land are debated: by managing their land more in line with financial logics to maximize revenues, these actors tend to favor projects targeting affluent populations to the detriment of urban needs such as affordable housing, public services, and public spaces (O'Brien et al., 2019; Frétingy et al., 2024).

Ecological and environmental issues have introduced new challenges for network operators. Objectives such as reducing land artificialization have created tensions regarding the availability of land resources for infrastructure. This has led some operators to drop off land disposal practices, opting instead to retain their properties, both to preserve future network development opportunities and to generate long-term revenue streams. These changes also influence the land-related procedures for network expansion, particularly regarding environmental mitigation, which are creating new markets (Berté, 2022).

This special issue of *Flux* seeks to address the land dimension of infrastructure and to explore the logics, practices, and tools engaged by network actors across different sectors in managing land and real estate.

Key questions include:

- What are the main current land and real estate challenges related to networks?
- How have the land and real estate strategies of network operators evolved over time?
- How do they deal with financial, industrial, territorial, and environmental issues in managing their assets?
- What are the effects of land management and rent-seeking strategies on network operations and territorial transformations?

This call invites articles based on in-depth empirical research and situated analyses, including historical perspectives, to document the practices of managing network operators' land properties using diverse disciplinary approaches (urban planning, geography, sociology, history, political science, etc.). While open to other perspectives, the call is structured around four areas of analysis:

### **1. Strategies and practices of land acquisition, management, and development**

- How have network operators' land and real estate practices evolved over time, and which rationales drive these changes?
- What are the consequences of governance and funding shifts on land and real estate management?

### **2. Resources and tools for land and real estate management**

- What organizational and professional resources, as well as tools and techniques, do network actors use to manage their properties?
- Which professionals handle these activities, and how do real estate industry practices, norms, and routines permeate infrastructure operators?

### **3. Material transformations of infrastructure land and territorial outcomes**

Part of the infrastructure operators' land portfolio, identified as surplus, is being repurposed for real estate developments, housing, activities, or other uses.

- How are projects on network operators' lands designed?
- What are the socio-spatial consequences of urban projects developed on infrastructure land?

#### 4. Greening land and real estate strategies

Environmental regulations, particularly those aimed at reducing land artificialization and requiring environmental mitigation, present new constraints for network operators' development projects as well as for the management of their existing properties. How do environmental imperatives, such as net zero land take and compensation mechanisms, shape land and real estate strategies?

#### Information for Authors

**- Deadline for Abstracts: January 15, 2025**

Contributors are invited to submit an abstract of no more than 4,000 characters, along with the names of the authors and their institutional affiliations, to: [juliette.maulat@univ-paris1.fr](mailto:juliette.maulat@univ-paris1.fr)

**- Deadline for Full Articles (First Version): July 1, 2025**

Based on abstracts pre-approved by the editorial board of the journal *Flux*, authors will have until July 1, 2025, to submit the full version of their article.

The article (written in English or in French) must comply with the journal's standards (see the author guidelines), which include:

- A maximum text length of 50,000 characters (including spaces)
- An abstract of 1,000 to 1,500 characters in both French and English.
- A biographical note of approximately 600 characters.

For more information about the journal *Flux* and the author guidelines: <https://revue-flux.cairn.info/wp-content/uploads/sites/8/2016/11/Flux-CONSIGNESAUTEURS-2022-VF-Mise-en-ligne-22-06-2022-1.pdf>

**The publication of this special issue is scheduled for June 2026.**

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