

5_ Methods and technologies for transformative planning

Co-chairs

Nicolas Douay (University of Grenoble, France)

Michele Campagna (University of Cagliari, Italy)

Irene Luque Martín (FABRICations/University of Twente, Netherlands)

Contemporary planning faces increased complexity in addressing global and local sustainability challenges. Climate change, population growth and concentration, migrations, threats to democracy are only few of the global phenomena which call for urgent actions. Innovation may contribute possible solutions to current development issues, but the way how it should be realized is still often unclear. More research is needed to understand how innovation can improve informed and democratic decision-making in spatial planning, and how current and forthcoming technologies and innovative design methods can be applied in territorial and urban systems sustainable conservation and transformation.

This track is thought as an inclusive arena to discuss latest research results in applying innovation in spatial planning and design, both from procedural / instrumental and substantive / material perspectives. Hence, two main questions arise: How can we improve the planning and design process to make it more inclusive, responsive to community needs, and effective in addressing current planning/design challenges? How can technologies and methods be applied to improve territorial and urban system performance and make them smarter for achieving long term sustainable development?

Contributions are welcome from academics and practitioners offering insights in such issues as territorial and urban system monitoring, knowledge building, design, impact assessment and decision-making, with a special attention on how to make the link between knowledge and action explicit and transparent to all.

Specific relevant topics to methods and technologies for planning includes, but are not limited to:

- Authoritative and Volunteered Geographic Information
- Remote sensing and sensor networks
- Social Media
- Big data
- Spatial analysis
- Spatial simulation and territorial modelling
- Algorithm and artificial intelligence in planning methods
- Planning Support Systems
- Political and socio-cultural impacts of technology in planning
- Theoretical perspectives and technology for planning
- Technologies for smart territorial and urban systems
- Technologies for participation and collaboration
- Geodesign

Keywords: (big) spatial data sources, social media, spatial analysis and modelling, geodesign, planning support systems, design technologies and methods, tools and workflows.