

**Call for Papers for a Special Issue:**  
“Planning and managing sustainable infrastructural megaprojects”

## **Background**

Infrastructure megaprojects are extremely large scale, typically complex, investment projects by the public or private sector aimed at developing and managing public utility infrastructures (i.e., dams, airports, highways, railways, wastewater systems, power plants, etc.). This kind of projects require high investment expenditure that exceeds USD 250 million or even USD 500 million according to some literature. In many cases megaprojects attract a lot of public attention because of substantial impacts on communities, environment and local and national government budgets, and may even require the creation of structures, equipment, purposefully prepared development sites, and new institutional forms for planning, construction and operation.

Empirical evidence suggests that even though infrastructural megaprojects have generally a great potential to generate wealth and benefit society, projects often fail to materialize or, when completed, are unable to meet expected performance targets. Costs and time are often underestimated, while benefits are usually overestimated due to optimism bias. Social and economic costs of megaprojects can be so high that they may seriously challenge the societal, environmental, business and financial sustainability. Due to the scale of project, sustainability goes beyond the project itself and depends on the extent future revenues exceed costs, the infrastructure will deliver economic and social services to users, the local or national authorities provide policy supports, and the infrastructure is environment respectful. Both the academic and professional literature has pointed out that many important pitfalls occur in the planning stage of the project, i.e. a lack or unfocused problem and requirement analysis, scarce consideration of alternatives, uncertainty and ambiguity in targets and costs estimation, limited stakeholder involvement or commitment, insufficient risk analysis, conflict over objectives and/or strategies concerning the project, lack of a sound business model, etc.

It is clear that the nature of infrastructure megaprojects challenges the traditional management approaches and tools, and a new philosophy and set of decision-making instruments are needed to get better results when managing this category of projects.

## **Scope of the Special Issue**

This special issue will provide an international forum to investigate, exchange novel ideas and disseminate knowledge covering the broad area of planning and managing sustainable infrastructure megaprojects. Experts and professionals from academia, industry, government and the public sector are invited to submit papers on their recent research and professional experience on the subject. High quality papers reporting on relevant, *review of existing literature, theoretical studies, case studies, surveys, experiences, success stories, real world examples* and *practice* are all very welcome. Interdisciplinary research is also encouraged.

In particular, as this special issue seeks to better understand how to improve the decision-making and planning processes, and to design evaluation metrics related to infrastructural mega-projects, contributions are expected (but not limited to) on the following topics:

### **Project planning and management tools**

- unconventional approaches and methodologies for project planning and management
- project planning and management in an adaptive framework
- cost and benefit measurement models
- human judgment and decision-making under uncertainty in project planning
- project modeling approaches and methods
- quantitative and qualitative risk analysis methodologies

- uncertainty, ambiguity and risk management
- sustainability performance measurements

Case studies relative to the following sectors (but not limited to)

- airports and seaports
- road infrastructure
- rail infrastructure
- potable water distribution infrastructure
- sewage infrastructure
- energy generation and distribution infrastructure
- water flood protection infrastructure

### **Key Dates for the Special Issue**

30/11/2012: Abstracts (200-300 words) due

15/12/2012: Decisions on abstracts sent to authors

15/05/2013: Full papers due

30/05/2013: Start of double-blind review process

30/08/2013: Announcement of review decisions

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Abstracts and full papers should be submitted to the co-editors, Naomi Brooks and Corrado lo Storto, via email. Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. (N.B.: Conference papers may only be submitted if the paper was not originally copyrighted and if it has been completely re-written).

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