

Improving Decision-Making for Mega Infrastructure Projects

*Study on the Possible Applicability of the Policy-Led Multi-Criteria Analysis (PLMCA)
to the Planning and Appraisal of Major Gateway Port Projects*

Friday, September 26th

Ralph and Goldy Lewis Hall, (RGL 219) USC Main Campus

Noon to 1:30 pm

RSVP to Janet Kleinman at janetkle@usc.edu



Marco Dean is a Ph.D. Student at the Bartlett School of Planning, University College London (UCL) as well as a Research Assistant of the OMEGA Centre at the Bartlett School of Planning, UCL. He holds a bachelor's and a master's degree in Civil Engineering from the University of Udine (2007 and 2010, respectively) and a master's degree in Infrastructure Planning from the University College London (2012).

Marco Dean's principal areas of research lie in the fields of transportation, logistics, complexity in strategic decision-making on major infrastructure projects, and planning and appraisal tools and techniques. He has published several articles on these topics.

The PhD Programme of Marco Dean focuses on '*The Applicability of Policy-Led Multi-Criteria Analysis to the Appraisal of Mega Infrastructure Seaport Projects in Major Port Cities*'. The research is based on the working hypothesis that the employment of Cost-Benefit Analysis (CBA) alone to the assessment of the viability and functionality of mega infrastructure seaport projects in major port cities may turn out to be insufficient outside of a broader policy-led multi-criteria appraisal framework. The PhD Programme also entails a cooperation with the European Investment Bank (EIB) throughout the first year of the PhD. This partnership is conceived within the STAgEs de REcherche BEI-EIB (STAREBEI) Research Programme, namely a EIB-Universities Research Action Programme. To support this research Marco Dean has been awarded an Industrial CASE studentships provided jointly by the Engineering and Physical Sciences Research Council (EPSRC) and the EIB.

ABSTRACT:

Mega infrastructure projects can be defined as extremely large-scale investment projects, typically costing more than \$1 billion, presenting usually long development cycles (in some cases even several decades) and generating substantial (direct and indirect) impacts on communities, environments, and budgets.

Among the long list of attributes used to describe such projects, nothing represents them more exhaustively as the concept of complexity. Complex projects are defined as projects consisting of many varied interrelated elements which can be also be organized in different subsystems or hierarchical levels.

Gateway port projects comprising a combination of port terminals, inland intermodal terminals and integrated logistics parks connected to each other by means of road and rail corridors are an example of complex projects.

International literature points out that, in many cases, decision-making processes on mega projects turn out not to be adequate. Indeed, by channeling decisions into rigid schemes of thought, narrowing the scope of analysis, limiting the involvement of those whose interests are affected and relying exclusively on simplistic evaluation techniques, traditional planning and appraisal methodologies are likely to prevent key decision makers from properly understanding the nature and balance of all the factors involved.

However, often, also the new planning and appraisal methods that are proposed to improve decision-making procedures do not appear to be totally satisfactory. In this regard, the author claims that the development of any new method should commence with a real appreciation of the meaning of complexity, a concept that is frequently misunderstood or treated according to a narrow perspective.