

Editorial: Establishing Collaboration in Public Engineering Projects

In many countries, there is a trend towards an increased use of models for collaborative contracting for infrastructure projects, both in the private and the public sector. Several forces drive this development: a general dissatisfaction with current construction costs and quality, increased technical complexity and uncertainty in projects, a shift of the allocation of risks and costs from the public to the private sector, higher demands for innovation, the strive for sustainability, the importance of lifecycle performance of buildings, and the development of new information technology. Especially for projects in the public domain, the influence of the institutional and social context is important to take into account since they have a significant impact on the design of project organizations.

Two years ago, we proposed to the editors of the *Engineering Project Organizational Journal (EPOJ)* to launch a special issue on collaboration in public engineering projects. During the preparations of a dedicated workshop at the MISBE 2011 conference in Amsterdam, we further explored the particular challenges faced by engineering projects in the public domain. At EPOC 2011, several papers were presented on this topic. The issues addressed at both conferences referred to the specific formal context in which the project partners are selected, to the bureaucratic culture of public agencies, and to the volatility of the political environment. They also showed the complexity and opportunities raised by the informal expectations of the stakeholders. It has been our privilege to assemble papers for this special issue providing new insights on this important theme. We hope that addressing these issues will inspire other researchers to specifically address the implications of a public context for the management of engineering projects.

The institutional settings have strong implications for the management and procurement of projects. Because of procurement laws designed to ensure values such as transparency, objectivity and equal treatment, the public context does not leave much room for trust-based partner selection, joint contract development, and successive adjustment of contractual obligations. The collaborative practices that have arisen in response to the dissatisfaction with traditional ways of working

include partnering contracts, alliance arrangements and other forms of public private cooperation, such as public private partnerships (PPPs). However, despite the large attention to partnerships in practice and academic literature and the considerable market share for public construction, few studies focus specifically on the consequences of new forms of collaborative governance for the performance of public projects and the implications for procuring and managing publicly owned assets. The special issue, therefore, focuses on contemporary practice in organizing and contracting inter-organizational collaboration in the construction industry, both at an institutional and managerial level of projects in the public domain.

The papers deal with a variety of themes relating to collaborative governance approaches in a range of countries and sectors. The special issue thus offers a broad overview of trends and developments in many parts of the world: India, Australia, the Netherlands, Denmark, and Greece. The contributions include many interesting and innovative cases. The differences in level of analysis, methodology, and research methods lead to a variety of new insights.

The first article by Gajendran and Brewer describes the problems of collaboration that arise in a project procured using traditional methods. They show how the contextual issues impact collaboration within an extension project of an Australian healthcare facility. Their study focuses on how the incentive structure and rigid communication channels affect trust and social relationships. The authors argue that collaboration occurs in two stages: development of a collective identity and translating this identity into synergistic action. Especially, the combination of the formal governance mechanisms and the sensitive political context of the client organization led to a negative collaborative climate. The analysis resulted in the identification of five contextual issues impacting collaboration in a public engineering project, which could be used for further research.

The article of Paisiou and Van Wezemael shows how institutional regulations influence the selection of an architect in a longitudinal case study. For more than three decades, the Greek government has been

struggling to integrate their architectural, political, economic, and cultural expectations into a design for the new Acropolis Museum. Using assemblage theory and the concept of concrete machines, Paisiou and Van Wezemael illustrate how the political context produces changes in preferences, which are hard to accommodate due to the lengthy and rigid processes outlined in the procurement regulations. This study underlines the importance of the interpretation of procurement procedures as implemented by client organizations.

Continuing on the project level, Hoezen, Voordijk and Dewulf have studied the complex interplay between negotiation and commitment in four comparable work packages of road maintenance activities in the Netherlands. These work packages consist of multiple construction works each containing between 100 and 200 objects. The paper analyses the impact of a new European procurement route, the Competitive Dialogue (CD) procedure, on formal and informal contracting processes. It generates interesting insights on how formal and informal processes during negotiations between public clients and private contractors are influencing commitments. The authors conclude that a different procurement route, such as the CD procedure, does not lead to a different formal contract, but does influence the informal processes or the sense-making process of the contract.

Moving to the institutional level, Gottlieb and Jensen describe how the Danish partnering discourse is reflected in government policy, industry reform initiatives, and trade magazines. They argue that partnering is not so much a question of institutionalizing a set of well-defined practices, as a process of de-institutionalizing traditional practice. A room for localized sense-making is opened up, leading to a variety of new approaches. Based on a project case study, they show how partnering can be seen as a collective sense-making process directed at (re-)creating a new form of rational behaviour under changing institutional conditions. The new practices emerging in this context tend to represent an explicit and marked difference to traditional, authoritarian, ways of working and are associated with values such as collaboration, empowerment, and equality.

The final article of Delhi and Mahalingam highlights differences in PPP arrangements between three different states in India. The authors generate new understandings of the role and the development of PPP enabling organizational fields. The theoretical analysis is based on a combination of social movement theory and institutional theory. The emergence of PPP in India clearly shows how actions are imbedded in organizational fields and, at the same time, are shaping those fields. This is in line with the renowned

structuration theory of Giddens, which recognizes that actors affect structure through their practices, and that structure affects the practices of actors. The paper contains various interesting lessons for policy-makers, such as the need for PPP policies to be tailored based on the contextual institutional conditions. Moreover, normative and cognitive alignment of logistics is required.

We conclude that most of the articles in this special issue discuss the complex interplay between formal and informal processes in engineering projects. Some papers are built on institutional theory; others adapt insights from behavioural science leading to the overall view that institutional arrangements, such as procurement structures, internal sense-making, and commitment of the actors involved in projects, affect the outcomes of engineering projects. Almost all cases illustrate how institutional contexts influence the informal patterns in projects and vice versa. The actions of partners lead at the same time to new formal arrangements.

The five papers provide input for a research agenda for the *EPOJ* community for the upcoming years. We would like to highlight three major research topics.

(1) Understanding the impact of collaborative arrangements

To cope with the challenges of the future, public clients will increasingly rely on various forms of partnering. Hence, the long-term effects of PPP collaboration on the quality of infrastructure and the built environment remain unclear. More in-depth studies are needed to understand the impact of collaborative arrangements in this respect.

(2) Standardization versus tailor-made approaches

The contributions to this issue provide many ex-post evaluations of past projects, but what can be learnt from these lessons for future projects? It would be interesting to further analyse the differences between continents and countries. Three of the articles are situated in the context of the European procurement regulations. Yet, all member states appear to react differently to the same formal measures. And even within countries, governance differs per district, as shown by Delhi and Mahalingam.

(3) The need for mixed research methods

An important notice of this special issue is that all contributions investigate the issue of collaboration on a qualitative matter. They also employ a multi-disciplinary perspective to address the complexity and dynamics of public projects. For the future, it would be interesting to explore the possibilities of mixed method research, as this could address long-term and short-term effects of institutional arrangements.

As editors of this special issue we would like to thank the editorial board of the *EPOJ* for their confidence

and support. We are convinced that the papers will contribute to the on-going debate in academic literature and practice.

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