Intention of the Research Project

No other field has as strong an influence on success in the planning and execution of a PPP project as the identification, evaluation, allocation and controlling of risk. Still, this field remains largely unresearched.

For many market participants, great uncertainty prevails in the management of risk. The choices for cost and quality assurance through active control of risks are barely known and are not exhausted adequately. Experiences from PPP pilot projects also show that great improvements are achievable in the recognition and evaluation of risk factors. For the optimisation of future PPP projects, a professional approach to risk management has become a necessity. The Bauhaus-Universität Weimar and its partners have set for themselves the target to make a significant contribution to addressing these issues.

The significance of risk in lifecycle-oriented real estate projects is most clearly present in long-term contractual engagements. The risk involved in a project needs to be calculated for the entire 20 to 30 year project life cycle and accordingly, risk must be controlled throughout that period. Another source of significant risk arises out of the scope of a project, which typically encompasses planning, construction, financing, maintenance, and operation. Every step of the value chain involves specific risk factors. Usually there are interdependency between risk factors, and various developments need to be taken into account over time. Therefore great attention needs to be paid by all of those who are involved in the project.

Benefits of the Research Project for the Stakeholders of a PPP Project:

**Public Principal:**
- Guideline for effective risk management
- Savings in time and money in the project through structured risk allocation and control

**Capital Investors and Insurer:**
- Facilitation of the due diligence process through standardised risk allocation
- Improvements in the implementation of financing and insurance products in the PPP market

**Construction Companies and Operators:**
- Improvement of the credit worthiness through professional risk management
- Improvement of risk management processes in the company
- Reduction of the proposal preparation costs through the use of standards in the tender documents

These statements are true in part for the public principal who, in addition to other topics, lays out the favoured risk allocation in the tender documents and thereby transfers certain risk factors and carries the balance. But these are also true for construction companies, operators and financing institutions, which also take on certain risk in PPP projects. All participants attempt to control their respective risk and to keep their exposure under control.

Due to the diverse perspectives and exposures to risk among the participants, special attention will be paid in the research project to the balancing of the respective interests of the participants. This is in recognition of the fact that an important requirement for a successful PPP project is a balanced distribution of risk which in turn makes possible the willingness and capability to bear risk.

Through the definition and compilation of recommended courses of action and the new design and focus of risk management in PPP projects, the evolving PPP project standardisation in Germany will be enhanced to include the field of risk management.
Lifecycle-Oriented Risk Management for PPP-Projects in Public Real Estate

Issues

Employment of Resources for the Structuring of Risk Management
- Unstructured capturing of risk factors
- Deficits in the identification, evaluation and analysis of risk
- Choices and alternatives of risk controlling are not exhausted

Handling of Risk by the various Stakeholders
- Suboptimal distribution of risk factors among the stakeholders
- Unclear structure of responsibility allocation for risk management among the stakeholders

Risk Management Process in PPP Projects
- Lack of a start-to-finish approach to risk from tendering to contract conclusion to operation
- Lack of an adequate definition of interfaces between the various stakeholders

Methodology

- Analysis of the current status of risk management in PPP projects
- SWOT analysis of risk management techniques and approaches

Objectives

Standardisation of Risk Management Techniques & Approaches for PPP Projects

Development of Balanced Risk Strategies for the Project Participants

Development of a Structured Risk Allocation Process for PPP Projects

- Analysis of the integration of risk management in the PPP process
- Analysis of the respective stakeholders’ capability to manage risk factors.

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