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Masterarbeit

„Analyse und Optimierung der Streckenverfügbarkeit von Autobahnen am Beispiel des PPP-Projektes „Ypsilon“, PPP Ostregion, Paket 1 in Österreich“

Zur Erlangung des akademischen Grades
„Master of Science“

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Summary

Europe will be implementing more and more government infrastructure in the form of PPP (Public-Private Partnership) projects.

This is a relatively new procurement concept and broadly refers to long-term, contractual partnerships between public and private sector agencies, specially targeted towards financing, designing, implementing, and operating infrastructure facilities services that were traditionally provided by the public sector.

In a PPP, each partner agrees to share responsibilities related to implementation and/or operation and management of a project. This collaboration is built on the expertise of each partner that meets defined public needs. Other aspects of PPP projects such as, details of implementation, termination, obligations, dispute resolution and payment arrangements are negotiated between the parties involved.

Consider the first Austrian PPP street-infrastructure project, the so called "Y" project (Ypsilon). The contract was assigned by ASFINAG via Bonaventure Strassenerrichtungs-GmbH to the (executing) consortium ARGE PPP - Eastern Region and to sub-contracted companies (tunneling, engineering, earth work, road construction) and FOEs. Under this contract, the consortium undertook to design, finance, and construct a total of 51 kilometers of road, and will operate this section north of the Austrian capital for 29 years. The new section comprises parts of the A5 North highway and the S1 and S2 northeastern beltway.

Focus of this work is to consider availability of influencing factors and the derivation or the identification of optimization opportunities to apply them in PPP infrastructure projects and can thus increase the effective availability of the concession route.

The Operating Company obviously has a great interest in the compensation from the project and property and therefore wishes to maximize, optimize and improve the economic return.

The identification of problems and defects in the already converted and now in operation project is based on analysis and evaluation. Hence the potential of the optimization of processes and events are derived. In addition to the factors affecting availability is also discussed contractual aspects that lead to a result of the organizational structure between the individual contractors to problems.

Furthermore, communication between the companies involved in the project will examine possible weak points and missing or incorrect information and will be covered within the meanings of the New Institutional Economics.

The aim of the study is to optimize the operational processes of conservation in terms of availability and also to formulate contractual and common approaches for optimizing availability models in the PPP infrastructure.