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# Research on Government Supervision of PPP Projects Based on the Whole Life Cycle

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## Abstract

The PPP model is an innovative infrastructure supply model that has rapidly developed in China as a new financing method. However, the traditional government supervision model has not adapted to the current development of PPP projects. The unclear positioning of the government causes misplaced or absent supervisory supervision, unclear supervision basis, and unclear supervision content, causing repeated supervision or lack of supervision and lack of social supervision mechanisms. This will affect the service quality of PPP projects. Based on the whole life cycle theory of PPP projects, the supervisory departments and each phase of the monitoring section are described, the government's the tradition of administration management supervision mode is improved, and a new type of government supervision system is constructed.

## Keywords

PPP project, government regulation, full life cycle.

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## 1. Introduction

The PPP model can reduce the financial burthen of government and provide rich the experience of project administration. Therefore, it is rapid development in China. Since the demonstration work of the PPP project was developed in 2014, the demonstration amount and the total investment amount have continuously increased. And it will be about 2. 5-3. 0 trillion in 2018, and it will be the year of PPP efficiency in 2018. The government is both a project participant and a supervisor in the project. The project has a long time. Therefore, the traditional government supervision is lagging behind and is incompatible with the current market economic system. Then how should the government supervision of the PPP project be adjusted?Based on all the life cycle theory of PPP project, the author clarifies the supervision of each stage and builds a new theory of government supervision system.

## 2. Overview of Government Supervision Over the Life Cycle of PPP Projects

### 2.1 Research Status of Intendance of Government of PPP Projects

The PPP model was rejuvenated in the United Kingdom and Foreign studies on the practical issues of the PPP pattern have made some achievements, and there has also been a ripe system of supervision of public projects. China introduced the PPP pattern later, more investigation on its model theory, risk and performance. Domestic scholars mainly study the setting up regulatory agencies, the promulgation of laws and other fields. More generally, they are more general introductions to theories and lack a clear research on the regulatory agencies and their functions at all stages of the project. Now that PPP is developing fleetly, it is very important to study the construction of the government supervision system for PPP projects throughout the life cycle.

## **2.2 Whole Life Cycle and Government Administration of PPP Projects**

The PPP full life cycle includes 5 phases. The supervision of PPP is based on the quality of PPP projects, and the formulation of administrative regulations to guarantee the desired results. All the life cycle PPP project government supervision is implemented in each of the five phases of the project. The factors that affect all the quality of the PPP project are at every stage. Therefore, government supervision must be meticulous to each step of the operating procedures. On the basis of the point of each stage, it is necessary to replace different regulatory bodies, formulate and implement regulatory activities, and guarantee implementation quality.

## **3. Status Quo and Problems of Government Supervision of PPP Projects in China**

### **3.1 Status of PPP Project Government Supervision**

At present, the administrative departments, judicial organs, and the government's own supervisory agencies jointly supervise the project. The administrative department is mainly responsible for the selection, demonstration, project selection, and selection of partners for PPP projects. Industry management departments are responsible for legislation and law enforcement, and supervision of service quality. Construction Supervisors Implement Unified Supervision and Management of Project Quality;The judiciary is in debt to judge crimes committed in public projects. The government's own supervision is mainly based on supervision of the financial department, and other departments assist in supervision, such as environmental protection departments, auditing agencies, etc. At present, government supervision of PPP projects in China is a multi-sectoral setup. With the reform of China's government supervision system, the establishment of industry supervision systems has begun to take shape in the area of urban infrastructure.

### **3.2 Problems with Government Supervision of PPP Projects**

There are deficiencies in the government supervision of PPP projects in china:First, government supervision departments are the main factors, and the government is unclear in the roles of the two layers, resulting in misalignment or lack of supervision;Second, the supervisory basis and regulatory content of the subsidiary controlling are not clear, resulting in supervision or absence;Third, there is a lack of social supervision mechanisms. PPP projects are mostly public infrastructure projects. The supervision of the PPP project by the social supervision system is necessary.

## **4. Based on all the Life Cycle of PPP Project Government Supervision System Construction**

The author introduces the government supervision of the whole life cycle theory of the PPP project and supervises the whole process of the project in five stages. In the supervision of various government departments to execute their blame, it is of great importance to supervise the whole life cycle of PPP projects. The government supervision system is revealed in “Fig. 1, ”

### **4.1 Project Identification Stage**

Third-party independent monitoring agencies supervise the whole process. First, the competent department of the industry puts forward proposals for the initiated PPP projects, and conducts audits and screenings. It also requires specific social capital to prepare project implementation plans;and with The Development and Reform Commission reviewed the evaluation report on value for money, Demonstrate the financial sustainable capacity report, calculate fiscal expenditure, and assess the impact of project expenditures on fiscal balance.

### **4.2 Project Preparation Stage**

The focus of this phase is the preparation and approval of the implementation plan and the implementation plan. The plan is authorized and approved by the national development and Reform

Commission, and an independent third-party regulator supervises it. The program needs to focus on the following five aspects(Table 1):

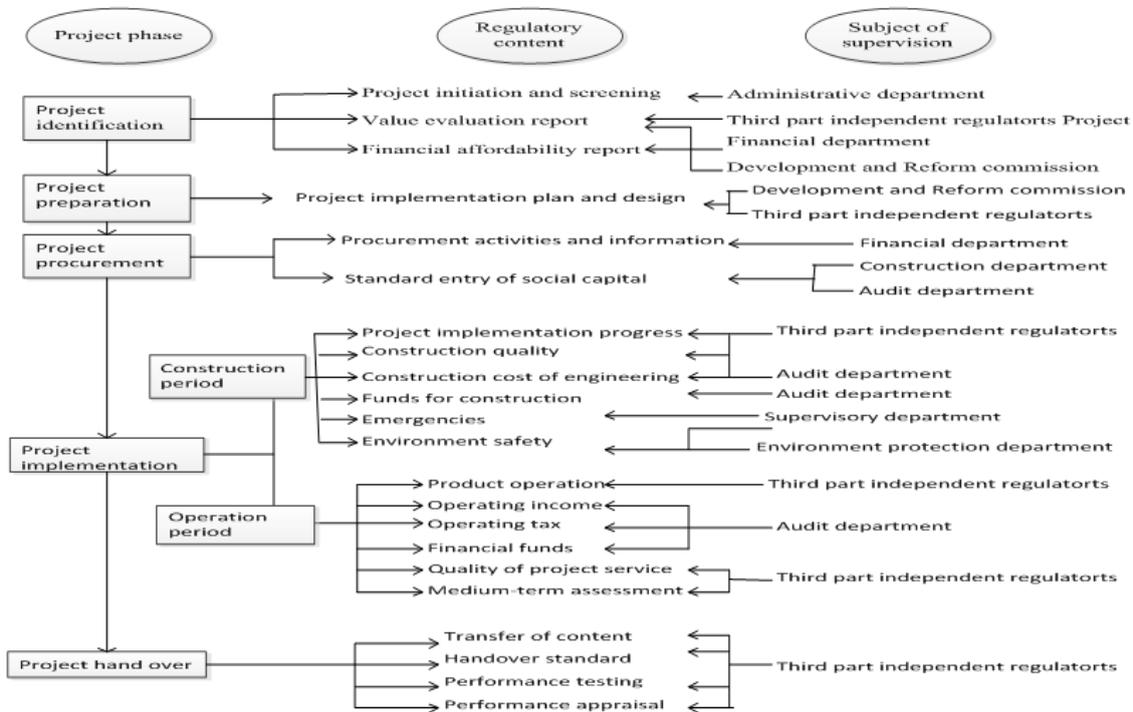


Figure 1. PPP Project Government Supervision System Based on the Whole Life Cycle Theory

Table 1 Five Concerns of the Project Design Plan

Principles to be followed	Specific requirements
Allocation of project risks	List of risks undertaken and risks shared
The project works	Meet the local economic development level and project characteristics
Purchase method	The best way: competitive negotiation and competitive negotiation
Transaction structure	Think factors including participants, investment and financing structure, etc.
Return mechanism	Select according to project characteristics

### 4.3 Project Purchasing Stage

The financial department must provide service support for procurement activities and consider responsibility for supervising and management, To open project procurement information on the platform in a timely manner, Including market tests, etc. to ensure overt and transparent.

The construction department will supervise the entry process of social capital. Examine the status of social capital qualifications, it must be coincident with the item situation, The department also has to examine the comprehensive strength of its professional qualifications.

The audit department supervises the examination of the qualifications of social capital access, audits the procurement contract, and examines whether the contract is connected with all aspects of financial settlement and whether there is a problem of asset loss.

### 4.4 Project Implementation Stage

Because of the specialty of PPP, independent third-party regulators must assume important regulatory responsibilities. First, supervising the advance of project carry out. Does not affect the normal implementation of the project can be on-site inspection, construction and operation of the sample or special inspection. Second, supervise project quality. The quality of the project will directly affect the lives of the general public and avoid the use of cost control to create a tofu project. And together with the composition department. Third, supervision of project composition costs. Check the running of funds and reasonably supervise the costs. Fourth, conduct midterm assessment of the project. The PPP project has a long cycle. Therefore, it is essential to implement periodic assessments of the engaging in of the project and the performance of the contract, including for the project business. Fifth, to avoid overloading the public infrastructure, and to strictly monitor product operating conditions and facility maintenance;For profitable projects, supervision of service quality and fee standards must be strengthened.

The audit department tracks the audits throughout the process and cooperates with third-party independent regulatory agencies to supervise each other. First, perform performance audits on the overall project effectiveness and make reasonable measurements of construction costs and operating benefits;Second, supervising the special use of financial funds, whether there is the appearance of transferring funds;Third, the supervision of project fund security issues. Prevent fraudulent funds and ensure the safety of funds to maintain the normal operation of the project;Fourth, VAT processing should be performed on the income from project operations, and related costs and input tax should be reviewed.

The supervision department supervises unexpected events and assists the environmental protection department in protecting the environment around the construction site and supervises the service quality of the project.

Environmental protection department supervises the surrounding environment of the project. When environmental issue increase, it is essential to guide the coordination of local government responses;In case of environmental pollution disputes, it is necessary to coordinate with the project company and conduct supervision and handling. Control index of discharge, verify the result of emission reduction tasks, and implement an environmental responsibility system;Responsible for contamination prevention and control effort in project construction;Do a good job in the promotion of environmental defending and raise awareness of environmental defending.

### 4.5 Phase of Project Transfer

At this stage, the project company will give the project ownership and operation rights to the government. Because the government is the receiver of the project, supervision is undertaken by the public and independent third-party monitoring agencies:First, Regulatory transfer content is complete;Second, develop transfer standards and conduct one-on-one tests on the transferred contents;Third, conduct performance tests on the transferred projects (see “Fig. 2, ” for details);Fourth, to regulate the performance audit after the transfer, that is, to supervise the cost-effectiveness, public satisfaction, regulatory effectiveness, etc.



Figure 2. Performance Test of Auditing Department PPP Project

## 5. Conclusion

With the development of public service, the PPP pattern is developing in full swing in China, but it also show some problems. The government is both a participant and a supervisor. Therefore, the supervision of the project requires multiple departments and independent third-party regulatory agencies to cooperate. With PPP development characteristics, drawing on advanced experience, based on the PPP project all life cycle theory, for each stage, clear the supervision responsibilities of diverse departments, and to build a government supervision system for PPP projects. A potential risk can become a huge "disaster" of PPP projects. Therefore, a sound government supervision system can ensure the sustainable and healthy development of PPP projects. This is of great significance to our public utilities.

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## References

- [1] He Yujia, Shi Lei. "Research on the role of government role of PPP project based on key success factors". J, Project Management Technology, 2018, 16(01): 24-29.
- [2] Yin Shaocheng. "Challenges and Countermeasures of Public Utilities Government Supervision in PPP Mode". J, Research on Administrative Law, 2017(06):114-124.
- [3] Wang Junhao, Xu Hui, Yu Jie. "Research on PPP Supervision System of Urban Public Utilities". J, Urban Development Research, 2017, 24(04): 92-99.
- [4] Liu Jiali, Xie Di. "New issues facing China's urban public utilities marketization and government supervision in the context of PPP". J, Economist, 2016(9):42-49.
- [5] Huang Yongzheng. "Analysis of Operational Process Management of PPP Project". J, Journal of Hunan Institute of Finance and Economics, 2016, 32(02):16-23.
- [6] Wang Shouqing, Liu Ting. "PPP project supervision: domestic and international experience and policy recommendations". J, Local Finance Research, 2014 (09): 7-12+25.
- [7] Abdel Azziz "Successful delivery of public-private partnership for infrastructure development". J, JCEM. 2017:918-931.