

BOT模式高速公路工程 施工总承包管理实务

General Contracting Management Practice
for Expressway Construction in BOT Mode

邓 勇 李景超 刘军权 白恩邴 / 著



科学出版社

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内 容 简 介

本书以国家鼓励支持的工程建设总承包为题材,详细记录 BOT 模式高速公路项目从工程发包到竣工运营的全过程。首先分析工程项目总承包法规政策背景、总承包建设模式及管理的重要性;其次讲述项目启动准备阶段、项目施工阶段、项目运营前准备阶段业主方、总承包方、分包方的建设管理;最后介绍总承包管理创新、总承包建设成果策划及总承包党建管理工作。

本书可供公路、铁路、水利等基础设施项目的投资、工程总承包、建筑施工、代建管理、咨询管理等行业的建设管理人员及政府工程发包人员参考,尤其适合作为 BOT、PPP 模式投资建设高速公路施工总承包管理相关人员的参考书。

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本书作序者中国工程院院士陈湘生(左)与本书作者刘军权合影

序

《BOT 模式高速公路工程施工总承包管理实务》是一本紧扣建设工程法律法规、贯穿高速公路建设工程全过程管理、科学筹划 BOT 模式施工总承包管理的指导书籍，是对新时期 BOT 模式工程总承包建设管理的创新实践的凝练，是高速公路工程基本建设管理程序的汇集，是高速公路建设项目管理实务型指导用书。该书阐述了依法建设的项目建设程序，凝练融汇了总承包管理的创新心得，从建设单位、总承包单位、施工主体单位的视角阐述了高速公路施工总承包的优势和意义、建设管理主体的设立、建设项目筹备策划、建设项目施工准备、建设项目管理、总承包风险管理、总承包建设管理创新及党建工作创新等内容。该书以建设工程实施期为时间轴系统阐述了施工总承包在项目建设管理中的主要做法和创新点，对高速公路建设行业的管理者具有重要的指导性和参考性。

近年来，政府加大了对高速公路工程基础设施项目 PPP、BOT 等投资建设模式的重视程度，对应的工程承包模式也呈现多样化，有工程总承包(EPC)模式、项目管理承包(PMC)模式、设计-建造(DB)模式、平行发包(DBB)模式、施工管理承包(CM)模式、建设-运营-移交(BOT)模式、公共部门与私人企业合作(PPP)模式等。希望该书的出版能为高速公路投资者、建设管理者、建筑施工企业提供一些有价值的管理理念，为高速公路等大型基础设施工程项目的建设筹备、管理创新提供一些可借鉴的管理方法，为进一步加强大型基础设施项目的计划管理、招投标管理、程序管理、目标管理、风险管理、要素管理起到抛砖引玉的作用。



2018年11月

Preface

General Contracting Management Practice for Expressway Construction in BOT Mode is a guiding book for the whole management process of the expressway construction project focusing on the construction laws and regulations. It is the guide to scientifically plan for general contracting management in BOT mode. This book is a concise summary of the innovative practice of general contracting management in BOT mode in the new era, the collection of the expressway construction management procedures, and the guidance of the expressway construction management practice. This book expounds the project construction procedures, and integrates the innovation experience of general contracting management. From the perspective of the proprietor, the general contractor and the subcontractor, it expounds the advantages and significance of general contracting management of expressway construction, the establishment of the main body, construction preparation and planning, construction management, risk management, management innovation of general contracting construction, and Party construction innovation, etc. The main principles and innovations of general contracting management are expounded in the timeline of implementation period of construction project. The publication of this book is important to managers of the expressway construction, and provides some guidance and reference.

In recent years, the government pays more and more attention to the investment construction mode of expressway construction such as PPP and BOT, and the corresponding project contracting modes are also diversified, including engineering procurement construction (EPC) mode, project management contracting (PMC) mode, design-build (DB) mode, design-bid-build (DBB) mode, construction management (CM) mode, build-operate-transfer (BOT) mode, public-private-partnership (PPP) mode, etc. It is expected that with the publication of this book the expressway investors,

construction managers and construction companies can be benefited. It provides them with management methodologies during construction preparation and management innovation in large infrastructure projects such as expressway, and plays a role in further improving the planning management, bidding management, procedure management, target management, risk management, and factor management of large infrastructure projects.

A handwritten signature in black ink, appearing to be 'J. J. Fu' or similar, written in a cursive style.

November, 2018

前 言

PPP 或 BOT 建设模式在基础设施建设领域的投资占比越来越大，对建设工程项目的建设、使用增值效应的影响日益凸显，其不仅是一种融资模式，更是新时期项目建设管理优化的创新模式。本书作者结合多年项目管理经验、PPP 和 BOT 项目成功运作的实践而编写本书，本书内容涵盖了从项目立项或核准起至项目竣工投入使用止的全过程管理内容，旨在为基础设施项目建设投资人、建筑施工企业、工程总承包企业、咨询企业的 BOT 项目建设管理提供参考。通过投建一体+总承包建设的方式，充分发挥总承包企业管理优势实现建设工程项目增值目标。

本书共分为五篇十二章，第一篇为 BOT 模式总承包项目概述，第二篇为项目启动准备阶段管理，第三篇为项目施工阶段建设管理，第四篇为项目运营前准备阶段管理，第五篇为总承包管理创新及党建工作策划。全书依据国家建设有关法律法规、政策、规章等，紧扣高速公路项目建设筹备重点内容、建设管理程序、建设管理措施、交竣工结算和验收、建设风险管控、建设管理创新等管理要点，分别从建设方、总承包方、施工方的角度，围绕施工总承包管理承前启后的契入点，着重从施工总承包优势分析、施工总承包依法确立、项目建设筹备工作、建设工程管理、交竣工验收组织、总承包风险管理、总承包管理创新、总承包项目党建工作创新等方面讲述高速公路工程施工总承包管理。

邓勇负责全书的构思、审稿及校正工作。全书共分为五篇，其中，李景超、白恩邴编写第一篇、第二篇和第三篇第六章，刘军权编写本书第三篇（第六章除外），邓勇编写本书第四篇、第五篇。本书著作过程中得到了中铁二十局简蒲高速总承包指挥部张敏、张会民、付涛、王会栓、潘析、史青峰、曹健、姚正军、危海源、周海、张健莉、陈桂玲、罗国红、孟祥瑞、何建平、钱磊等管理人员的良好建议和著作支持，在此一并表示感谢。

希望本书能够为建设领域同仁们提供一些有价值的参考，因建设法规不断更新，本书难免有不妥之处，敬请读者批评指正并提出宝贵意见。



2018 年 11 月

Foreword

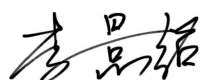
The PPP or BOT construction mode has an increasing proportion in the investment for infrastructure construction, and becomes more and more prominent in construction and engineering projects with its value-added effects. The PPP or BOT construction mode is not only a financing mode, but also an innovative mode for construction management optimization in the new era. The authors of this book have years of project management experience and successful practice of PPP or BOT projects. This book covers the complete end to end management process of a project from the initialization to the handover, aiming at providing references to the construction investors, construction companies, general contracting enterprises and consulting enterprises of BOT projects. And through an integrated approach of “invest to construct + general contracting”, the management advantages of the general contracting enterprises will be brought into full play to realize their value-added goals of the construction project.

This book is comprised of five parts and twelve chapters, which are Part 1 for overview of general contracting project in BOT mode, Part 2 for management in project start-up preparation stage, Part 3 for management in project construction stage, Part 4 for management in project pre-operation stage, and Part 5 for innovation of general contracting management and planning of Party construction. This book is based on relevant construction laws, policies and regulations, and focuses on key points of preparation management for the expressway projects, the procedures and measures of construction management, the completion settlement and acceptance of the construction, the risk management and control, and the construction management innovation. From the perspective of the contractors, the general contractors and the subcontractors, this book describes the whole process of general contracting management

during its implementation, and focuses on the analysis of the advantages of general contracting, the initialization of general contracting, the preparation for construction, the construction management, the completion and acceptance of construction projects, the risk management and management innovations of general contracting, and the innovation of the Party construction.

Deng Yong is responsible for designing, reviewing and correcting of this book. This book is comprised of five parts. Li Jingchao and Bai Enli are writers of the Part 1, Part 2 and Chapter 6 of Part 3; Except for Chapter 6, Liu Junquan writes all others of the Part 3; Deng Yong writes the Part 4 and Part 5; Zhang Min, Zhang Huimin, Fu Tao, Wang Huishuan, Pan Xi, Shi Qingfeng, Cao Jian, Yao Zhengjun, Wei Haiyuan, Zhou Hai, Zhang Jianli, Chen Guiling, Luo Guohong, Meng Xiangrui, He Jianping, Qian Lei in Jianpu Expressway General Contracting Department of the 20th Bureau of China Railway participate in the writing. Appreciate for their good advice and support!

It would be our great pleasure should some colleagues in the construction circle were benefited after reading this book. Due to the changing construction laws and status, some improper parts would always be inevitable. It will be appreciated if our beloved readers would contribute your valuable comments to us for either criticism or correction.



November, 2018

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