

菲迪克(FIDIC)文献译丛

菲迪克(FIDIC)合同指南

The FIDIC Contracts Guide

国际咨询工程师联合会 编译
中国工程咨询协会

唐 萍 张瑞杰 张 洁 翻译
唐 萍 校译
王 川 徐礼章 审订

(2000 年第 1 版)
(中英文对照本)

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出版经理：Peter van der TOGT

继 2002 年出版的适应各类工程、各种承包方式的 4 本新版 FIDIC 合同条件中英文对照本，新版《菲迪克(FIDIC)合同指南》中英文对照本又出版了。至此菲迪克整套新版合同范本和应用指南中译本已全部出齐。这是我国投资建设领域人们关心的一件大事。它将推动我国工程项目管理迈向国际标准，走上新的台阶。

本《菲迪克(FIDIC)合同指南》是对照国际咨询工程师联合会(FIDIC 即菲迪克)编写的最新英文版本，由 FIDIC 在中国的成员协会—中国工程咨询协会组织专家编译。

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在我国进一步对外开放，加入世界贸易组织的新形势下，加强建设项目的合同管理已成为建设领域的紧迫任务之一。《菲迪克(FIDIC)合同指南》和 FIDIC 新版合同条件中译文版的出版，将为我国广大工程咨询单位和人员、从事投资、金融和工程项目管理的部门和组织、各类项目业主、建筑施工/监理企业、工程承包企业、环保企业、会计/律师事务所、保险公司以及有关高等院校学习国际经验，提供重要帮助。也是各专业注册工程师必读的书。

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北京市版权局著作权合同登记号：图字：01-2002-3637

图书在版编目(CIP)数据

菲迪克(FIDIC)合同指南/国际咨询工程师联合会，
中国工程咨询协会编译. —北京：机械工业出版社，
2003.5

(菲迪克(FIDIC)文献译丛)
ISBN 7-111-12229-1

I. 菲… II. ①国…②中… III. 基本建设项目—
经济合同—指南 IV. F284-62

中国版本图书馆 CIP 数据核字(2003)第 038616 号

机械工业出版社(北京市百万庄大街 22 号 邮政编码 100037)
责任编辑：何文军 责任校对：贾立萍

封面设计：姚 毅 责任印制：付方敏

北京铭成印刷有限公司印刷·新华书店北京发行所发行
2003 年 6 月第 1 版·第 1 次印刷
890mm×1240 mm A4·44.75 印张·1446·千字
本书定价：360.00 元

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FIDIC is the French acronym for the International Federation of Consulting Engineers.

F IDIC was founded in 1913 by three national associations of consulting engineers within Europe. The objectives of forming the federation were to promote in common the professional interests of the member associations and to disseminate information of interest to members of its component national associations.

Today FIDIC membership numbers more than 60 countries from all parts of the globe and the federation represents most of the private practice consulting engineers in the world.

F IDIC arranges seminars, conferences and other events in the furtherance of its goals: maintenance of high ethical and professional standards; exchange of views and information; discussion of problems of mutual concern among member associations and representatives of the international financial institutions; and development of the consulting engineering industry in developing countries.

F IDIC publications include proceedings of various conferences and seminars, information for consulting engineers, project owners and international development agencies, standard pre-qualification forms, contract documents and client/consultant agreements. They are available from the secretariat in Switzerland.



菲迪克(FIDIC)简介

FIDIC (中译“菲迪克”)是国际咨询工程师联合会的法文首字母缩写。

菲迪克(FIDIC)是由欧洲三个国家的咨询工程师协会于 1913 年成立的。组建联合会的目的是共同促进成员协会的职业利益, 以及向其成员协会会员传播有益信息。

今天, 菲迪克(FIDIC)已有来自于全球各地六十多个国家的成员协会, 代表着世界上大多数私人执业的咨询工程师。

菲迪克(FIDIC)举办各类研讨会、会议及其他活动, 以促进其目标: 维护高的道德和职业标准; 交流观点和信息; 讨论成员协会和国际金融机构代表共同关心的问题; 以及发展中国家工程咨询业的发展。

菲迪克(FIDIC)的出版物包括: 各类会议和研讨会的文件, 为咨询工程师、项目业主和国际开发机构提供的信息, 资格预审标准格式, 合同文件、以及客户与工程咨询单位协议书。这些资料可以从设在瑞士的菲迪克(FIDIC)秘书处得到。

“菲迪克(FIDIC)文献译丛”出版前言

世界工程咨询业已有上百年的发展历史，成为各国投资建设领域重要的智力服务行业。国际咨询工程师联合会(按其法文缩写 FIDIC, 通称菲迪克)成立已有 80 多年，是国际工程咨询业的权威性行业组织，与世界银行等国际金融组织有着密切的联系。菲迪克的各种文献出版物，包括各种合同、协议标准范本、各项工作指南、以及工作惯例建议等，得到世界各有关组织的广泛承认和实施，是工程咨询行业的重要指导性文献。

我国工程咨询业是改革开放以来，在原有工程设计和建设管理队伍基础上发展起来的，承担着为各级投资决策部门和各类建设项目提供战略规划、项目决策、工程设计、以及项目实施管理等投资建设全过程的咨询服务。今后随着我国建设事业的发展，项目的决策与实施要求提供咨询服务的工作量将会大量增长，咨询服务质量要求也将越来越高。特别是我国已加入世界贸易组织(WTO)，投资建设领域既有新的机遇，也有新的挑战。借鉴国外工程咨询的成功经验，努力提高我国工程咨询服务水平，已成为当务之急。

中国工程咨询协会于 1996 年正式加入菲迪克组织，并取得在我国翻译出版菲迪克文献的授权。为了系统介绍菲迪克有关出版物，协会成立了菲迪克文献编译委员会，将以“菲迪克文献译丛”形式，陆续翻译出版菲迪克有关文献。

我们相信“译丛”的出版，将为我国广大工程咨询单位和人员、从事投资、金融和工程项目管理的部门和组织、各类项目业主、建筑施工监理企业、工程承包企业、环保企业、会计/律师事务所、保险公司以及有关高等院校学习国际经验，提供重要帮助。

中国工程咨询协会

编者的话

新版《菲迪克(FIDIC)合同指南》是由国际咨询工程师联合会(FIDIC 即菲迪克)适应其新出版的三本合同条件，于 2002 年编写的权威性应用指南。菲迪克(FIDIC)三本新版合同条件，即《施工合同条件》、《生产设备和设计-施工合同条件》和《设计采购施工(EPC)/交钥匙工程合同条件》，是认真吸取过去经验，加入新的理念，适应各类工程和各种承包管理方式，重新编写的、相互配合的一整套合同格式。合同通用条件统一为固定的 20 条，专用条件几本合同各自适应不同的承包方式。应用时可以灵活选择“拼装”。这为各类工程普遍采用国际经验创造了重要条件。

为了帮助有关人员学习应用这套新版合同条件，《菲迪克(FIDIC)合同指南》对三种合同条件的特点对比、编写中的考虑或理由、以及一些条款的解释做了说明，对如何选用适合的合同格式、实施中如何把握，如何编写合同专用条件、及附件等提供了指导意见。对学习用好国际工程承包经验具有重要意义。

希望此译本的出版，对我国广大有关单位和人员在学习和运用菲迪克合同条件，有效地解决在国际、国内工程咨询和工程承包活动中的合同管理问题，更好地开拓国内外工程咨询和工程承包市场，促进我国工程咨询业与国际惯例接轨，推动我国工程咨询事业的发展会有所帮助。

翻译过程中，我们虽然尽力想使译文准确通顺，但限于专业知识与语言水平，译文中可能出现不妥乃至错误之处，敬请读者指正。

本书由唐萍、张瑞杰、张洁翻译，唐萍校译，王川、徐礼章审订。

中国工程咨询协会 FIDIC 文献编译委员会

Acknowledgements

The Fédération Internationale des Ingénieurs-Conseils (FIDIC) extends special thanks to its Contracts Committee: Michael Mortimer-Hawkins (Chairman), Consulting Engineer, UK; Axel-Volkmar Jaeger, Schmidt Reuter Partner, Germany; Christopher Wade, SWECO-VBB, Sweden, Peter L. Booen (Principal Drafter), GIBB Ltd, UK; with Special Advisers (and former Chairman of the Contracts Committee), John B. Bowcock, Consulting Engineer, UK, and K. B. (Tony) Norris, Consulting Engineer, UK, and Legal Adviser Christopher R. Seppala, White & Case, France.

The Contracts Committee, and FIDIC, would like to especially acknowledge the extraordinary effort of Peter L. Booen, the Principal Drafter of the Guide, as well as being the Principal Drafter of the 1995 Conditions of Contract for Design-Build and Turnkey (informally titled "The Orange Book"), the "Orange Book Guide", and the three "major New Books" of 1999, Conditions of Contract for Construction, Conditions of Contract for Plant and Design-Build and Conditions of Contract for EPC/Turnkey Projects. The prodigious effort offered by Peter Booen to FIDIC, and to the Consulting Engineering Industry, by these principal draftsman tasks, is impossible to evaluate, but is extremely high. Peter shares, with his colleagues on the Task Groups and Contracts Committee, the gratitude of FIDIC, for these Task Group efforts. Members of the above Contracts Committee and Advisers, however, wish to acknowledge the nearly "single handed" effort of Peter Booen in drafting this FIDIC Contracts Guide, which was reviewed and commented upon by them all.

About the Principal Drafter

Peter L. Booen FICE FCI Arb is a civil engineer who started his career with a contractor (1965-72) before joining Sir Alexander Gibb & Partners (later GIBB Ltd) consulting engineers, UK. He has written and administered many engineering and construction contracts, both nationally and internationally, including those involving financial institutions. He has acted as adjudicator, conciliator, expert witness, and on dispute boards. He has been actively involved in FIDIC since 1993, as principal drafter of the Orange Book and its Guide, and the three major 1999 Books (Construction, Plant and Design-Build and EPC/Turnkey). He is a member of FIDIC's Contracts Committee and Chair of FIDIC's Assessment Panel for Adjudicators.

致谢

国际咨询工程师联合会(FIDIC)向 FIDIC 合同委员会的以下成员特致谢意: 英国咨询工程师 Michael Mortimer-Hawkins (主席)、德国 Schmidt Reuter Partner 公司的 Axel-Volkmar Jaeger、瑞典 SWECO-VBB 公司的 Christopher Wade、英国 GIBB 有限公司的 Peter L. Booen (主要起草人); 特别顾问, 英国咨询工程师 John B. Bowcock (合同委员会前主席)和英国咨询工程师 K. B. (Tony) Norris 以及法律顾问, 法国 White & Case 公司的 Christopher R. Seppala。

合同委员会和 FIDIC 还要向 Peter L. Booen 先生——本指南的主要起草人, 对他做出的特殊努力特致谢意。他还是 1995 年《设计-施工和交钥匙合同条件》(通称《橙皮书》)、《橙皮书指南》以及 1999 年三本“主要的新版合同条件”——《施工合同条件》、《生产设备和设计-施工合同条件》和《设计采购施工(EPC)/交钥匙工程合同条件》的主要起草人。作为上述合同的主要起草人, Peter Booen 先生通过这些主要起草人的工作, 对 FIDIC 和工程咨询业做出的巨大贡献是非常崇高的, 无法估量的。Peter 与各工作组和合同委员会的同事们分享 FIDIC 对各工作组所做的努力的感谢。但上述合同委员会成员和顾问们都希望感谢 Peter Booen 先生在起草并经他们所有人审查和评论这本 FIDIC 合同指南中几乎是“单枪匹马”的努力。

关于主要起草人

Peter L. Booen, FICE FCI Arb (英国土木工程学会会员、特许仲裁员学会会员) 是一名土木工程师。他的职业生涯从承包商开始(1965-1972), 然后加入了英国 Sir Alexander Gibb & Partners 工程咨询公司(后名为 GIBB 有限公司)。他编写并管理过许多国内和国际的工程和施工合同, 包括金融机构参与合同。他曾担任裁决员、和解员、专家证人和争端委员会成员。自 1993 年以来, 他作为橙皮书及其指南、三本 1999 年版的主要合同(施工、生产设备和设计-施工和设计采购施工(EPC)/交钥匙)的主要起草人, 积极参与了 FIDIC 的工作, 他还是 FIDIC 合同委员会委员和 FIDIC 裁决员评价委员会主席。

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In 1999, Fédération Internationale des Ingénieurs-Conseils ("FIDIC") published the following four forms of contract, the first three of which are covered by this Guide and referred to as "CONS", "P&DB" and "EPCT":

"CONS": Conditions of Contract for Construction,

which are recommended for building or engineering works designed by the Employer or by his representative, the Engineer. Under the usual arrangements for this type of contract, the Contractor constructs the works in accordance with a design provided by the Employer. However, the works may include some elements of Contractor-designed civil, mechanical, electrical and/or construction works.

"P&DB": Conditions of Contract for Plant and Design-Build,

which are recommended for the provision of electrical and/or mechanical plant, and for the design and execution of building or engineering works. Under the usual arrangements for this type of contract, the Contractor designs and provides, in accordance with the Employer's requirements, plant and/or other works; which may include any combination of civil, mechanical, electrical and/or construction works.

"EPCT": Conditions of Contract for EPC/Turnkey Projects,

which are recommended for the provision on a turnkey basis of a process or power plant, and which may also be used where one entity takes total responsibility for the design and execution of a privately financed infrastructure project which involves little or no work underground. Under the usual arrangements for this type of contract, the entity carries out all the Engineering, Procurement and Construction ("EPC"); providing a fully-equipped facility, ready for operation (at the "turn of the key").

Short Form of Contract,

which is recommended for relatively simple or repetitive work, or for work of short duration or of small capital value. The Short Form of Contract is not covered by this Guide.

In this Guide to the use of CONS, P&DB and EPCT, the word "Books" (with capital letter) is used when referring to the three publications: CONS, P&DB and EPCT. These Books were initially published as Test Editions in 1998, and the many reactions to them were reviewed before the First Editions were published in 1999.

These three Books were prepared by FIDIC's Update Task Group comprising: Christopher Wade (Group Leader), SWECO-VBB, Sweden; Peter L. Booen (Principal Drafter), GIBB Ltd, UK; Hermann Bayerlein, Fichtner, Germany; Christopher R. Seppala (Legal Adviser), White & Case, France; and José F. Speziale, IATASA, Argentina. These publications were prepared under the general direction of the Contracts Committee, which then comprised John B. Bowcock, Consulting Engineer, UK; Michael Mortimer-Hawkins, SwedPower, Sweden; and Axel-Volkmar Jaeger, Schmidt Reuter Partner, Germany; together with K. B. (Tony) Norris as Special Adviser.

国际咨询工程师联合会(FIDIC 菲迪克)于1999年出版了以下4本合同格式,本指南覆盖了前三本合同,并简称为"CONS", "P&DB"和"EPCT":

"CONS": 《施工合同条件》

推荐用于由雇主或其代表——工程师设计的建筑或工程项目。这种合同的通常情况是,由承包商按照雇主提供的设计进行工程施工。但该工程可以包含由承包商设计的土木、机械、电气和(或)构筑物的某些部分。

"P&DB": 《生产设备和设计-施工合同条件》

推荐用于电气和(或)机械设备供货和建筑或工程的设计与施工。这种合同的通常情况是,由承包商按照雇主要求,设计和提供生产设备和(或)其他工程;可以包括土木、机械、电气和(或)构筑物的任何组合。

"EPCT": 《设计采购施工(EPC)/交钥匙工程合同条件》

推荐用于以交钥匙方式提供加工或动力工厂;也可用于由一个实体承担全部设计和实施职责的,涉及很少或没有地下工程的私人融资的基础设施项目。这种合同的通常情况是,由该实体进行全部设计、采购和施工(EPC),提供一个配备完善的设施,("转动钥匙"时)即可运行。

《简明合同格式》

推荐用于较简单或重复性的、或工期较短的、或资本金额较小的工程项目。本指南不包括简明合同格式。

在本CONS、P&DB和EPCT应用指南中,"Books"(首字母大写)一词是指CONS、P&DB和EPCT这三本出版物。这些书曾于1998年作为试用版发行,经审核很多反馈意见后1999年出版了第1版。

这三本书由菲迪克(FIDIC)新版工作组以下成员编写:瑞典SWECO-VBB公司的Christopher Wade(组长),英国GIBB有限公司的Peter L. Booen(主要起草人),德国Fichtner公司的Hermann Bayerlein;法国White & Case公司的Christopher R. Seppala(法律顾问),及阿根廷IATASA公司的José F. Speziale。这些出版物的编写是在合同委员会指导下进行的,该委员会当时由英国咨询工程师John B. Bowcock、瑞典SwedPower公司的Michael Mortimer-Hawkins、德国Schmidt Reuter Partner公司的Axel-Volkmar Jaeger,并以K. B. (Tony) Norris为特别顾问组成。

This Guide was written by Peter L. Booen and reviewed by the Contracts Committee which now comprises Michael Mortimer-Hawkins (Chairman), Christopher Wade, Axel-Volkmar Jaeger and Peter L. Booen; together with John B. Bowcock as Special Adviser and Christopher R. Seppala as Legal Adviser. The commentary on Clause 18 was also reviewed by Mark Griffiths, Griffiths & Armour, UK.

FIDIC wishes to record its appreciation of the time and effort devoted by all the above.

Each of the three Books is in three parts:

- General Conditions, the part which is intended to be incorporated (by reference) into each contract, and whose Sub-Clauses are often referred to in this Guide without the use of the word "Sub-Clause" (for example: "CONS 1.1");
- Guidance for the Preparation of the Particular Conditions, the part which is referred to in this Guide as "GPPC", which commences by proposing suitable wording to incorporate the appropriate General Conditions into a contract, and which concludes with annexed example forms of securities; and
- Forms of Letter of Tender, Contract Agreement and Dispute Adjudication Agreement, the part which is referred to in this Guide as "the Example Form(s)".

In this Guide, the texts in the Books are reproduced in a three-column layout. The texts should be identical to the corresponding texts in the Books, but the reader should refer to the Books in order to determine the necessary authentic wording in case of any discrepancy.

For the convenience of those who are familiar with the General Conditions of Contract contained in FIDIC's previous publications, the reference numbers of their sub-clauses which cover similar subject-matter are included within an insert box after these three-column texts reproduced from the Books, the sub-clause reference numbers being related to:

- "RB": Conditions of Contract for Works of Civil Engineering Construction 4th edition 1987 amended 1992 (which was commonly referred to as the Red Book)
- "YB": Conditions of Contract for Electrical and Mechanical Works 3rd edition 1987 amended 1988 (which was commonly referred to as the Yellow Book)
- "OB": Conditions of Contract for Design-Build and Turnkey 1st edition 1995 (which was commonly referred to as the Orange Book).

In each Contract, the Conditions of Contract governing the rights and obligations of the parties will comprise the appropriate General Conditions together with Particular Conditions. It will be necessary to prepare the Particular Conditions for each individual contract, taking account of the comments in this Guide and the appropriate GPPC. It is essential that all these drafting tasks, and the entire preparation of the tender documents, are entrusted to personnel with the relevant expertise, including the contractual, technical and procurement aspects.

本指南由 Peter L. Booen 编写，合同委员会审阅，该委员会成员现包括：Michael Mortimer-Hawkins (主席)、Christopher Wade、Axel-Volkmar Jaeger 和 Peter L. Booen，还有特别顾问 John B. Bowcock 和法律顾问 Christopher R. Seppala。对第 18 条的解释是由英国 Griffiths & Armour 公司的 Mark Griffiths 审阅的。

菲迪克(FIDIC)对所有上述人员和组织付出的时间和精力表示感谢。

三本书的每本都分成三部分：

- 通用条件，本部分是拟(通过引用)纳入每个合同的，在本指南通常提到通用条件条款时，不使用某“款”一词(例如：第 1.1 款写成“CONS 1.1”)；
- 专用条件编写指南，本部分在本指南中称为“GPPC”。从提出将通用条件纳入合同的适当措辞开始，以所附各种担保范例格式结束；
- 投标函、合同协议书和争端裁决协议书格式，本部分在本指南中称为“范例格式”。

在本指南中，引用三本书原文时，分列为三栏的格式。引文应与各书的相应原文完全相同，但读者应参照各书原文，以便有出入时确定必要的正确措辞。

为了使熟悉菲迪克(FIDIC)先前出版的合同通用条件的人对照方便，题目相近条款的参考编号列在三栏引文下面的方框中，这些条款参考编号标明以下书名缩写：

- “RB”：《土木工程施工合同条件》1987 年第四版 1992 年的修订本(通称红皮书，Red Book)
- “YB”：《电气与机械工程施工合同条件》1987 年第三版 1988 年的修订本(通称黄皮书，Yellow Book)
- “OB”：《设计-建造与交钥匙工程合同条件》1995 年第一版(通称橙皮书，Orange Book)

在每本合同中，约束双方权利和义务的合同条件包括适当的通用条件和专用条件。为每个单独合同编制专用条件时，要考虑本指南中的意见和适当的 GPPC (专用条件编写指南)。所有这些起草工作和招标文件的编写，有必要委托给具有包括合同、技术和采购方面专门知识的人员。

Although this Guide may include useful material for the training of personnel in procurement, it is not intended to provide complete training material for the expertise required for the preparation of tender documents. The comments in this Guide are intended to assist users of the Books who have such expertise, such users being those who write or administer building and/or engineering contracts.

The comments in this Guide are not exhaustive and are only intended to provide general guidance. They should not be relied upon in a specific issue or situation. Expert legal advice should be obtained whenever appropriate, and particularly before entering into or terminating a contract. Neither FIDIC nor the persons named in this Guide accept any responsibility or liability arising from any use of this Guide or of any other publication named herein.

FIDIC receives requests from time to time to assist in the interpretation of individual contracts which are based upon conditions of contract incorporating FIDIC publications. However, as the international federation of consulting engineers, FIDIC cannot undertake to give legal advice. For this reason, and because the legal interpretation of a contract will depend upon such matters as the precise wording of the various documents comprising the particular contract, as well as upon the governing law, FIDIC cannot assist in the interpretation of individual contracts.

虽然本指南可能包括一些对培训采购人员有用的材料，但不是为编制招标文件所需专门知识提供详尽的培训资料。本指南中的意见，是为了帮助那些已有此类专门知识的，编写或管理施工和(或)工程合同的三本书的用户。

本指南中的意见还不是详尽的，只为提供一般指导。对于特殊问题或情况，不应完全靠它。适当时，特别在签订或终止合同前，应取得专家的法律咨询。菲迪克(FIDIC)或本指南中指名的人，不承担由于使用本指南或其中指名的任何其他出版物引起的任何责任。

菲迪克(FIDIC)不时收到关于帮助解释一些根据菲迪克(FIDIC)出版的条件编写的具体合同的请求。但是，菲迪克(FIDIC)作为国际工程咨询工程师联合会，不能承担提供法律咨询。且因为一个合同的法律解释，有赖于构成特定合同的各种文件的精确用词和管辖法律等事项，因此菲迪克(FIDIC)不能帮助解释具体合同。

Comparison of the main features of the three Books

CONS: Conditions of Contract for Construction	P&DB: Conditions of Contract for Plant and Design-Build	EPCT: Conditions of Contract for EPC/Turnkey Projects
Recommended for building and engineering works if most (or all) of the works are to be designed by (or on behalf of) the Employer.	Recommended for the provision of electrical and/or mechanical plant and for building and engineering works if most (or all) of the works are to be designed by (or on behalf of) the Contractor.	Suitable for a process or power plant, a factory or similar facility, or an infrastructure project or other type of development, if (i) a higher degree of certainty of final price and time is required, and (ii) the Contractor takes total responsibility for the design and execution of the project.
The Contract typically becomes legally effective when the Employer issues the Letter of Acceptance to the Contractor.	The Contract typically becomes legally effective when the Employer issues the Letter of Acceptance to the Contractor.	The Contract typically becomes legally effective in accordance with the Contract Agreement.
Alternatively, there may be no such Letter, and the Contract becomes effective in accordance with the Contract Agreement.	Alternatively, there may be no such Letter, and the Contract becomes effective in accordance with the Contract Agreement.	The Letter of Tender may be worded so as to allow for the alternative of the Contract becoming effective when the Employer issues a Letter of Acceptance.
The Contract is administered by the Engineer who is appointed by the Employer. If disputes arise, they are referred to a DAB for its decisions.	The Contract is administered by the Engineer who is appointed by the Employer. If disputes arise, they are referred to a DAB for its decisions.	The Contract is administered by the Employer (unless he appoints an Employer's Representative) who endeavours to reach agreement with the Contractor on each claim.
Alternatively, Particular Conditions may specify Engineer's decisions on disputes, in lieu of a DAB.	Alternatively, Particular Conditions may specify Engineer's decisions on disputes, in lieu of a DAB.	If disputes arise, they are referred to a DAB for its decisions.
The Contractor designs (but only to the extent specified) and executes the works in accordance with the Contract (which includes the Specification and Drawings) and the Engineer's instructions.	The Contractor provides plant, and designs (except as specified) and executes the other works, all in accordance with the Contract, which includes his Proposal and the Employer's Requirements.	The Contractor provides plant, and designs and executes the other works, ready for operation in accordance with the Contract, which includes his Tender and the Employer's Requirements.
Interim and final payments are certified by the Engineer, typically determined by measurement of the actual quantities of the works and applying the rates and prices in the Bill of Materials or other Schedules.	Interim and final payments are certified by the Engineer, typically determined by reference to a Schedule of Payments.	Interim and final payments are made without any certification; typically determined by reference to a Schedule of Payments.
Other valuation principles can be specified in Particular Conditions.	The alternative of measurement of the actual quantities of the works and applying the rates and prices in a Schedule of Prices can be specified in Particular Conditions.	The alternative of measurement of the actual quantities of the works and applying the rates and prices in a Schedule of Prices can be specified in Particular Conditions.
The General Conditions allocate the risks between the parties on a fair and equitable basis: taking account of such matters as insurability, sound principles of project management, and each party's ability to foresee, and mitigate the effect of, the circumstances relevant to each risk.	The General Conditions allocate the risks between the parties on a fair and equitable basis: taking account of such matters as insurability, sound principles of project management, and each party's ability to foresee, and mitigate the effect of, the circumstances relevant to each risk.	Disproportionately more risks are allocated to the Contractor under the General Conditions. Tenderers will require more data on hydrological, sub-surface and other conditions on the Site, to the extent that this data is relevant to the particular type of works, and more time to review the data and evaluate such risks.

三本书主要特点对比

CONS: 《施工合同条件》	P&DB: 《生产设备和设计-施工合同条件》	EPCT: 《设计采购施工(EPC)/交钥匙工程合同条件》
推荐用于由雇主(或其代表), 承担大部分(或全部)设计的建筑或工程项目。	推荐用于由承包商(或其代表) 承担大部分(或全部)设计的电气和(或)机械设备供货和建筑或工程项目。	适用于(i)项目的最终价格和工期要求有更大的确定性,(ii)由承包商承担项目的设计和实施全部职责的,加工或动力设备、工厂或类似设施、基础设施项目或其他类型开发项目。
一般在雇主给承包商颁发中标函时, 合同在法律上生效。	一般在雇主给承包商颁发中标函时, 合同在法律上生效。	一般按照合同协议书的规定, 合同在法律上生效。
替代地, 也可以不要这种函, 合同按照合同协议书生效。	替代地, 也可以不要这种函, 合同按照合同协议书生效。	投标函可以写明, 允许采用替代作法, 在雇主颁发中标函时合同生效。
合同由雇主指派的工程师管理。如果发生争端, 交由 DAB 决定。	合同由雇主指派的工程师管理。如果发生争端, 交由 DAB 决定。	合同由雇主管理(除非由其指派一个雇主代表)努力与承包商就每项索赔达成协议。
替代地, 也可以在专用条件中规定, 工程师的决定代替 DAB 决定。	替代地, 也可以在专用条件中规定, 工程师的决定代替 DAB 决定。	如果发生争端, 交由 DAB 决定。
由承包商按照合同(包括规范要求 and 图纸)和工程师指示, 设计(只按规定的范围)和实施工程。	由承包商按照合同, 包括其建议书和雇主要求, 提供所有生产设备、设计(另有规定的除外)和实施其他工程。	由承包商按照合同, 包括其投标书和雇主要求, 提供生产设备、设计和实施其他工程, 达到准备好运行投产。
期中付款和最终付款由工程师证明, 一般是按实际工程量的测量及应用工程量表或其他资料表中的费率和价格计算确定。其他估价原则可以在专用条件中规定。	期中付款和最终付款由工程师证明, 一般参照付款计划表确定。 替代的按实际工程量的测量和应用价格表中的费率和价格的办法, 可在专用条件中规定。	期中付款和最终付款无需任何证明, 一般参照付款计划表确定。 替代的按实际工程量的测量和应用价格表中的费率和价格的办法, 可在专用条件中规定。
通用条件在考虑保险可能性、项目管理的合理原则和每方对每种风险的有关情况的预见能力和减轻影响的能力等事项后, 在公正、公平基础上, 在双方间分配风险。	通用条件在考虑保险可能性、项目管理的合理原则和每方对每种风险的有关情况的预见能力和减轻影响的能力等事项后, 在公正、公平基础上, 在双方间分配风险。	根据通用条件, 把较多的风险不平衡地分配给承包商。投标人将需要更多的对工程具体类型有关的现场水文、地下及其他条件的数据, 以及更多的时间审查这些数据 and 评价此类风险。

Introduction

to the Use of FIDIC's Conditions of Contract

Standardisation, both in technical and administrative matters, is desirable for the satisfactory execution of many types of commercial projects. Major projects, whether they are predominantly building, civil engineering, chemical engineering, electrical engineering, mechanical engineering, or any combination, are frequently complex. With the resulting increased complexity of contract conditions, it is becoming increasingly important for them to be based upon a standardised form of contract with which the contracting parties and financial institutions are familiar.

In the majority of cases, the contracting parties will react favourably to such a standardised form of contract, which should lessen the likelihood of unsatisfactory performance, increased costs and disputes. If the contract is to be based on standard conditions of contract, tenderers should not need to make financial provision for unfamiliar contract conditions. The widespread use of standard conditions also facilitates the training of personnel in contract management, reducing the need for them having to work with ever-changing contract conditions.

The object of this Guide is to assist personnel involved in contracts based upon any of FIDIC's three Books:

- Conditions of Contract for Construction, which are recommended for building or engineering works designed by the Employer or by his representative, the Engineer. However, the works may include some elements of Contractor-designed civil, mechanical, electrical and/or construction works.
- Conditions of Contract for Plant and Design-Build, which are recommended for the provision of electrical and/or mechanical plant, and for building or engineering works designed by the Contractor.
- Conditions of Contract for EPC/Turnkey Projects, which may be suitable, where (i) a higher degree of certainty of final price and time is required, and (ii) the Contractor takes total responsibility for the design and execution of the project, with little involvement of the Employer.

These Books were prepared as a "matching set", with each topic being covered in similarly-worded provisions in each Book except where otherwise necessary. However, adoption of similarly-worded provisions may occasionally be considered to have resulted in the inclusion of a provision which is only applicable in a few of the contracts for which the Book will be appropriate.

The Books are all intended to be flexible in use, recognising the wide variety of users' requirements. Where a sub-clause deals with a matter on which different contract terms are likely to be applicable for different contracts, the sub-clause was drafted in anticipation of alternative possibilities: including it not being required, or it being amended in Particular Conditions.

关于使用菲迪克合同条件的 引言

为了圆满实施许多类型的商业性项目，最好在技术和管理两方面都要标准化。大型项目，无论主导的是建筑、土木工程、化学工程、电力工程、机械工程或其任何组合，常常是复杂的。随着合同条件复杂性的增加，把它们建立在合同各方和融资单位都熟悉的、标准化的合同格式基础上，变得越来越重要了。

在大多数情况下，合同各方对于能够减少履约不合要求、增加成本和争端的可能性的标准合同格式，反映会是良好的。合同如能建立在标准的合同条件基础上，投标人不一定要为不熟悉的合同条件而做财务方面的准备。标准合同条件的广泛采用也有利于培训合同管理人员，减少他们不得不对待不断变化的合同条件的需要。

本指南是为了帮助介入以菲迪克3 本合同条件(下文中原文“Book”一般译为“合同条件”——译注)任一本为基础的合同的人员：

《施工合同条件》，推荐用于由雇主或其代表工程师设计的建筑或工程。工程中可以包括由承包商设计的土木、机械、电气和(或)构筑物的某些部分。

《生产设备和设计-施工合同条件》，推荐用于由承包商承担电气和(或)机械设备供货，以及由其设计的建筑或工程。

《设计采购施工(EPC)/交钥匙工程合同条件》，可用于(i)项目的最终价格和工期要求有更大的确定性，(ii)由承包商承担设计和实施全部职责，雇主介入很少的项目。

这些合同条件是按“相互配合的一套”编写的，每本合同条件中的每个论题，除非另有需要，都采用措辞相似的规定来表述。但是，采用措辞相似的规定，有时可能被认为导致包括某项仅可用于适合本合同条件的少数合同的规定。

考虑到用户要求的广泛性，这三本合同条件都设想可以灵活应用。如果某款处理不同合同可能适用不同合同条件的某事项时，该条款起草时已预期了变通的可能：包括它但不用它，或者在专用条件中进行修改。

These aspects are clarified in the Guide for each Sub-Clause, so as to assist in the preparation of tender documents. When preparing the Conditions of Contract for issue to tenderers, users should review the GPPC (and, for CONS or P&DB, the Example Form of Appendix to Tender) and then review the General Conditions and this Guide in order to assess whether each provision is consistent with the requirements for the particular contract.

Selection of the appropriate Book is critical to the success of a project. Their main features are summarised in the Table above, from which it should be clear that the appropriate Book cannot be selected until certain decisions have been made on project procurement aspects. These decisions may be illustrated by the following general guidance on the selection of the appropriate Book.

A relatively small value contract, short construction time or involving simple or repetitive work

If the price for the contract is relatively small (say under US\$ 500,000) or the construction time is short (say less than 6 months), or the work involved is relatively simple or repetitive (dredging work might be a good example), then consider using the Short Form of Contract, irrespective of whether the design is provided by the Employer or the Contractor, and of whether the project involves construction, electrical, mechanical, or other engineering work.

Larger or more complex projects

1. Is the Employer (or the Engineer) going to do most of the design?

- As in traditional projects (e.g., infrastructure, buildings, hydropower, etc.), the Employer did nearly all the design (perhaps not construction details, reinforcement, etc.),
- and the Engineer administered the Contract, monitored the construction work and certified payment,
- and the Employer was kept fully informed, could make variations, etc.,
- and with payment according to bills of quantities or lump sums for approved work done.

If this is what is wanted - choose CONS.

2. Is the Contractor going to do most of the design?

- As in traditional projects (e.g., electrical and mechanical works, including erection on site), the Contractor did the majority of the design (e.g., the detail design of the plant or equipment), so that the plant met the outline or performance specification prepared by the Employer, and in design-build and turnkey-type projects, the Contractor also did the majority of the design (not only of plant projects, but also of various infrastructure and other types of projects), and the project was required to fulfil an outline or performance specification prepared by the Employer,
- and the Engineer (or Employer's representative) administered the Contract, monitored the manufacture and erection on site or construction work and certified payment.

本指南中对这些方面，都按每个条款予以澄清，以帮助编写招标文件。在编制颁发给投标人的合同条件时，用户应研究 GPPC（专用条件编写指南）（对 CONS 或 P&DB 两书还应研究投标书附录的范例格式），然后研究通用条件及本指南，以评估每项规定是否与具体合同的要求一致。

选择适当的合同条件对项目的成功至关重要。它们的主要特点已在前表中扼要列出，从中应清楚看到，在项目采购方面作出明确的决定前，不能选定恰当的合同条件。这些关于选用恰当的合同条件的决定可用下列一般指南说明。

价值较小的合同，施工期短，或包含简单的或重复性的工作

如果合同价值较小（例如 50 万美元以下），或工期短（例如 6 个月以下），或包含的工程较简单或是重复性的（疏浚工程也许是好的一例），则不论设计是否由雇主或承包商提供，以及项目是否涉及建筑物、电气、机械或其他工程，可考虑使用简明合同格式。

较大或较复杂的项目

1. 雇主（或工程师）是否要做大部分设计？

- 如在传统项目中（例如基础设施、建筑、水电站等），雇主承担几乎全部设计（也许不做施工详图、加筋等）；
- 并由工程师管理合同，监督施工，证明付款；
- 并使雇主随时充分了解情况，能作出变更等；
- 并按工程量表付款，或按对批准的已完工作总额付款。

如果要求是这样，选择 CONS（《施工合同条件》）。

2. 承包商是否要做大部分设计？

- 如在传统项目中（例如电气和机械工程，包括现场安装），承包商承担大部分设计（例如生产设备或装备的详细设计），使生产设备符合雇主编制的纲要或性能规范。在设计-施工和交钥匙类型的项目中，承包商也承担大部分设计（不仅是生产设备项目，还有各种基础设施和其他类型的项目），并要求项目符合雇主编制的纲要或性能规范；
- 并由工程师（或雇主代表）管理合同、监督设备制造与现场安装、或施工作业，以及证明付款；

- and with payment according to achieved milestones generally on a lump sum basis.

If this is what is wanted - choose P&DB.

3. Is it a Privately Financed (or Public/Private Financed) Project, of the Build-Operate-Transfer or similar type, where the Concessionaire takes total responsibility for the financing, construction and operation of the Project?

- Then the Concessionaire (the "Employer") probably requires to have a contract with the construction Contractor, i.e., an EPC (Engineer, Procure, Construct) Contract, where the Contractor takes total responsibility for the design and construction of the infrastructure or other facility, and where there is a higher degree of certainty that the agreed contract price and time will not be exceeded,
- and the Employer does not wish to be involved in the day-to-day progress of the work, provided the end result meets the performance criteria he has specified,
- and the parties concerned (e.g., sponsors, lenders and the Employer) are willing to see the Contractor paid more for the construction of the Project in return for the Contractor bearing the extra risks associated with enhanced certainty of final price and time.

If this is what is wanted - choose EPCT.

4. Is it a Process Plant or a Power Plant (or a factory or similar) where the Employer (who provides the finance) wishes to implement the Project on a Fixed-Price Turnkey Basis?

- Then the Employer wishes the Contractor to take total responsibility for the design and construction of the process or power facility and hand it over ready to operate "at the turn of a key",
- and the Employer wishes a higher degree of certainty that the agreed contract price and time will not be exceeded,
- and the Employer wishes the Project to be organised on a strictly two party approach, i.e., without an "Engineer" being involved,
- and the Employer does not wish to be involved in the day-to-day progress of the work, provided the end result meets the performance criteria he has specified,
- and the Employer is willing to pay more for the construction of his Project (than would be the case if P&DB were used) in return for the Contractor bearing the extra risks associated with enhanced certainty of final price and time.

If this is what is wanted - choose EPCT.

5. Is it an Infrastructure Project (e.g., road, rail link, bridge, water or sewage treatment plant, transmission line, even dam or hydropower plant) or similar where the Employer (who provides the finance) wishes to implement the Project on a Fixed-Price Turnkey Basis?

- 付款方式一般按实际完成的工程“里程碑”总额支付。

如果要求是这样，选择 P&DB (《生产设备和设计-施工合同条件》)。

3. 是不是私人融资(或公/私融资)项目，采用建造-运行-移交的类似形式，由特许权所有人对项目的融资、施工和运行承担全部职责？

- 这时，特许权所有人(“雇主”)也许需要与建设承包商签一个合同，即 EPC (E,设计;P,采购;C,施工)合同，规定由承包商承担基础设施或其他设施的设计和施工的全部职责，并做到不超过协议合同价格和工期，实现更大程度的确定性；
- 只要最终结果符合雇主规定的性能标准，雇主不希望介入工作的日常进展；
- 有关各方(例如：发起人、贷款人和雇主)宁愿对承包商建设的项目多付一些款，作为对承包商为提高最终价格和工期的确定性而承担额外风险的回报。

如果要求是这样，选择 EPCT (《设计采购施工(EPC)/交钥匙工程合同条件》)。

4. 是不是加工设备或动力设备(或工厂或类似的设施)，雇主(由其提供资金)希望按固定价交钥匙方式完成项目？

- 这时，雇主希望承包商承担加工或动力设施的设计和施工的全部职责，做好移交、“转动钥匙”即可运行的准备；
- 雇主希望协议合同价格和工期都不超过，实现更大程度的确定性；
- 雇主希望项目按照严格的双方方式组织实施，即没有“工程师”参与；
- 只要最终结果符合雇主规定的性能标准，雇主不希望介入工作的日常进展；
- 雇主愿意为其项目建设(较用 P&DB 方式)多付款，作为对承包商为提高最终价格和工期的确定性而承担额外风险的回报。

如果要求是这样，选择 EPCT (《设计采购施工(EPC)/交钥匙工程合同条件》)。

5. 是不是基础设施项目(如：公路、铁路、桥梁、供水或污水处理厂、输电线，乃至水坝或水电站)或类似工程，雇主(由其提供资金)希望按固定价格交钥匙方式完成项目？

- Then the Employer wishes the Contractor to take total responsibility for design and construction,
- and the Employer wishes a higher degree of certainty that the agreed contract price and time will not be exceeded (except that, if underground works in uncertain or difficult ground conditions are likely, the risk of unforeseen ground conditions should be borne by the Employer and P&DB 4.12 would be appropriate),
- and the Employer wishes the Project to be organised on a strictly two party approach, i.e. without an "Engineer" being involved,
- and the Employer does not wish to be involved in the day-to-day progress of the work, provided the end result meets the performance criteria he has specified,
- and the Employer is willing to pay more for the construction of his Project (than would be the case if P&DB were used) in return for the Contractor bearing the extra risks associated with enhanced certainty of final price and time.

If this is what is wanted - choose EPCT.

6. Is it a Building Project where the Employer wishes to have his building(s) constructed on a Fixed-Price Turnkey Basis generally complete with all furniture, fittings and equipment?

- Then the Employer wishes the Contractor to take total responsibility for design and construction,
- and the Employer wishes a high degree of certainty that the agreed contract price and time will not be exceeded,
- and the Employer wishes the Project to be organised on a strictly two party approach, i.e. without an Employer's Engineer or Architect being involved,
- and the Employer does not wish to be involved in the day-to-day progress of the construction work, provided the end result meets the performance criteria he has specified,
- and the Employer is willing to pay more for the construction of his Project (than would be the case if P&DB were used) in return for the Contractor bearing the extra risks associated with enhanced certainty of final price and time.

If this is what is wanted - choose EPCT. In the case of a building, or of a building development project, the Employer or his architect may have done some or most of the design, but (with suitable modification regarding design responsibility) EPCT may be used.

Is it a reconstruction or refurbishment or other type of Project?

Check the above questions, as applicable, and make your choice accordingly.

- 这时，雇主希望承包商承担设计和施工的全部职责；

- 雇主希望协议合同价格和工期都不超过，具有更大程度的确定性（如可能有在不确定或困难场地条件下的地下工程，未预见的场地条件的风险应由雇主承担，并适用 P&DB 4.12 的情况除外）；

- 雇主希望项目按照严格两方的方式组织，即没有“工程师”参与；

- 只要最终结果符合雇主规定的性能标准，雇主不希望介入工作的日常进展；

- 雇主愿意为建设其项目（较用 P&DB 方式）多付款，作为对承包商为提高最终价格和工期的确定性承担额外风险的回报。

如果要求是这样，选择 EPCT（《设计采购施工（EPC）/交钥匙工程合同条件》）。

6. 是不是建筑项目，雇主希望其建筑物按固定价格交钥匙方式建设，通常配齐家具、装置、设备？

- 这时，雇主希望承包商承担设计和施工的全部职责；

- 雇主希望协议的价格和工期都不超过，具有更大程度的确定性；

- 雇主希望项目按严格两方的方式组织，即没有雇主的工程师或建筑师参与；

- 只要最终结果符合雇主规定的性能标准，雇主不希望介入工作的日常进展；

- 雇主愿意为建设其项目（较用 P&DB 方式）多付款，作为对承包商为提高最终价格和工期的确定性而承担额外风险的回报。

如果要求是这样，选择 EPCT（《设计采购施工（EPC）/交钥匙工程合同条件》）。如果是建筑或建筑开发项目，雇主或其建筑师可能已做了某些或大部分设计，但（还有对设计职责的适当修改）仍可采用 EPCT。

是不是改建、装修或其他类型的项目？

根据适用情况，核对上述问题，据此做出选择。

At the inception stage of a project, procurement options should be reviewed and a decision made as to the most appropriate option. This stage in the procurement of each project should include the determination of the appropriate procurement strategy, with decisions being reached on the following matters:

- the works to be executed under each contract (often called "contract packaging"); and, for each contract
- the extent of design to be provided to, or to be carried out by, the contractor, and
- lump-sum, measure-and-value, cost-plus or other basis for determining the final contract price.

For a large project, decisions on the number and scope of contracts may be critical to the eventual success of the project. Having a large number of contracts may give the Employer more control than under a single contract for the entire project, and may be more economic by maximising competitive pricing. However, these advantages may be offset by a greater extent of co-ordination risk borne by the Employer.

For each contract, the party responsible for the design will develop it during the detailed design stage. If the design is carried out by (or on behalf of) the Employer, he will have a greater control over the details. However, problems may on occasions arise from the division of responsibility between designer and constructor.

If the constructor (the Contractor) is responsible for the design, he will wish to develop it in his own interests, subject to any constraints in the Contract. The Employer will have less control over the design than he would have if he was responsible for providing it. Under Contractor-design, the contract price would typically have been tendered on a lump-sum basis, so any change in cost (increase or decrease) to the Contractor, resulting from design development, would not be passed on to the Employer.

Design by (or on behalf of) the Employer

Under CONS, design is the responsibility of the Employer, except to the extent that Contractor-design is specified in the Contract. The Specification must therefore clearly state which (if any) parts of the Works shall be designed by the Contractor, and should also specify the appropriate criteria with which these parts shall comply. If most of the Works are to be designed by the Contractor, CONS would usually be considered inappropriate.

CONS' Clause 12 sets out the measure-and-value basis for determining the contract price, providing a convenient mechanism for valuing the many variations typically instructed under Employer-design. CONS' GPPC includes example text for the alternative option of lump-sum pricing, but this arrangement typically necessitates completion of design before tenders are invited and may give rise to problems evaluating

在项目开始阶段,应研究采购方案,并对最适合方案作出抉择。每个项目采购的这一阶段,应包括恰当采购战略的确定,并就下列事项做出决定:

- 根据每一合同(通常称为“合同包”)要实施的工程,并对每个合同
- 要向承包商提供、或由其承担的设计范围;
- 确定最终合同价格的方式:总额、测量与估价、成本加价、或其他方式。

对于大型项目,合同数目和范围的决定,对项目的最终成功可能至关重要。签订多个合同比整个项目只有一个合同,可以使雇主更好地控制,而且通过使价格竞争最大化能够更加经济。但是,这些好处可能被雇主主要承担更大的协调风险所抵消。

对于每项合同,负责设计的一方要在详细设计阶段展开它。如果设计是由(或代表)雇主做,他将对细节有更大的控制。但是在设计者和施工者之间的职责分工有时会发生问题。

如果由施工者(承包商)负责设计,他将希望在服从合同的任何约束下,为自己的利益展开它。这样,雇主对设计的控制比自己负责设计时就较少了。由承包商设计,合同价格一般是按总价投标的,所以由设计展开产生的、对承包商的任何成本变化(增或减),都不会转嫁给雇主。

由(或代表)雇主设计

根据 CONS (《施工合同条件》),除合同规定由承包商设计的范围外,设计是雇主的职责。因此,规范要求必须明确规定工程的哪些部分(如果有)应由承包商设计,还要规定这些部分应遵照的适当标准。如果大部分工程要由承包商设计,一般认为 CONS 可能不合适。

CONS 第 12 条为确定合同价格规定了以测量与估价为基础,为通常根据雇主设计指示的大量变更进行估价,提供了方便的机制。CONS 的 GPPC 包括了总额估价替代方案的范例文本,但这种安排一般需要在招标前完成设计,从而引起对变更的估价问题。

variations. Alternatively, CONS may be used with Particular Conditions invoking a cost-plus basis for determining the contract price, for use when all cost risk is to be borne by the Employer (for urgent works or works of uncertain scope, for example).

Design by the Contractor (the constructor)

Under P&DB or EPCT, design is the responsibility of the Contractor. He will wish to economise, in terms of his costs, which may be at the expense of quality. Therefore, it is considered essential that the Employer has (or procures) expert technical services, in order to ensure that his requirements are elaborated in the tender documents and are achieved in practice. If expertise is unavailable, problems may arise, particularly in respect of the need for variations.

Under a contract for Contractor-design:

- variations should be instructed as varied requirements with which the Contractor's design must comply, and not as a varied design instructed by (or on behalf of) the Employer, and
- the costs and other consequences of variations should be agreed in advance, so as to minimise disputes.

In practice, these aspects can make Contractor-design appear somewhat inflexible. Contractor-design is typically less amenable to variations initiated by the Employer, compared with CONS' Employer-design where the designer is independent of the Contractor.

Although Contractor-design prevents the Employer from having a close involvement in the design process, it does enable him to have the benefits of (i) lump-sum pricing, (ii) the Contractor's undivided liability for the works (including design), and (iii) the potential savings (in cost and time) due to a degree of overlap of design and construction.

This overlap of design and construction may (or may not) lessen the total period between the commencement of the preparation of tender documents and the completion of construction, because the saving may be offset by the lack of continuity of the design processes during the pre-contract stages. Under CONS' Employer-design, design development should continue uninterrupted.

Procurement Decisions

As previously stated, procurement should commence with strategic decisions on contract packaging and, for each contract, on the allocation of design responsibility and on the basis for determining the contract price. It is only after these above matters have been considered and decisions reached, that a decision should be made on the appropriate General Conditions to be incorporated into the particular Contract. There remains a possibility that, in borderline cases, the selection of the appropriate Book at this stage may be provisional and may need to be reviewed subsequently. For example, if a contract was to require the Contractor to design two-thirds of the works, it might be difficult to decide whether to use CONS or P&DB. It might even be necessary to draft two alternative sets of Particular Conditions, one for CONS and the other for P&DB, and only then decide which set to adopt.

替代地, CONS 可以通过在专用条件中规定实行成本加价方式来确定合同价格, 在一切费用风险都由雇主承担(例如紧急工程或范围不确定的工程)时采用。

由承包商(施工者)设计

根据 P&DB 或 EPCT, 设计是承包商的职责。他将希望节省成本, 从而可能牺牲质量。因此, 雇主具有(或采购)专门技术服务, 被认为是重要的, 以保证他的要求在招标文件中经过仔细推敲并在实施中实现。如无专门知识, 可能发生问题, 特别是关于需要变更时。

根据由承包商设计的合同:

- 变更应作为对承包商设计必须遵守的改变的要求发出指示, 而不是作为雇主(或其代表)对改变设计的指示, 以及
- 变更引起的费用和其他后果应事先达成协议, 以尽量减少争端。

在实践中, 这些方面可能使承包商设计看来有些不灵活。与 CONS 中设计者独立于承包商的情况相比, 承包商设计对雇主提出的变更, 一般不那么顺从。

虽然承包商设计雇主不能在设计过程中紧密参与, 也使他得到好处: (1)总额作价; (2)承包商对工程(包括设计)的完整责任; (3)由于设计与施工有一定的搭接而有节约(费用和时间)的可能。

这种设计和施工的搭接可能(也许不会)缩短从开始编制招标文件至竣工的整个期间, 因为节省的部分, 可能被签合同前各阶段中各设计过程缺乏连续性所抵消。根据 CONS 中的雇主设计, 设计的开展应是连续不间断的。

采购决定

如前所述, 采购应从合同包对每个合同设计职责的分配、以及确定合同价格的依据等战略决策开始。只应在考虑了上述这些事项, 并做出决定后, 再决定具体合同的适用的通用条件。但仍有可能在一些边际情况下, 这个阶段对合同条件的选定可能是暂时的, 随后可能还要研究。比如, 如果合同要求承包商设计工程的三分之二, 也许难于决定采用 CONS 或 P&DB。甚至有必要起草两套可供选择的专用条件, 一套为 CONS, 另一套为 P&DB, 只有这时才能决定采用哪一套。

If the result of the above analysis is a decision to procure the works on the basis of Employer-design, CONS provides an internationally acceptable basis for the tender documents. CONS may be used for a wholly Employer-design contract, whether for a wholly civil engineering project or for the civil engineering part of a multi-contract project, although the latter type of project may give rise to significant co-ordination problems. CONS may be equally suitable for a multi-disciplinary contract, if most of the design is to be carried out by (or on behalf of) the Employer. CONS includes some of the provisions relating to Contractor-design, and other such provisions can readily be included in the Particular Conditions and/or the Specification.

If the result of the above analysis is a decision to procure the works on the basis of Contractor-design, either P&DB or EPCT may be used; whether for the procurement of individual items of plant, individual structures, and/or complete facilities including those under turnkey contracts. Turnkey contracts include most or all of the fixtures, fittings and equipment (f.f.e.) required for the provision of a fully-equipped-facility, ready for operation (at the "turn of the key"). It is possible to use either Book for a plant, design-build or turnkey contract. The particular features of the actual project may have a major effect on the choice of Book, and on the drafting of the Particular Conditions and the other tender documents. The choice of Book for Contractor-designed Works may depend upon the availability of (i) the more detailed data required for an EPCT contract, and/or (ii) the time necessary to acquire such data.

Tenderers Need Data to Assess Risks

Tenderers for a construction contract need to study hydrological and sub-surface data, to the extent that this data is relevant to the particular type of works, in order to plan and estimate the costs of the excavation and other works. Under CONS, this is the primary use of this data, which the Employer makes available under Sub-Clause 4.10.

Under a P&DB or EPCT contract, and also in the case of a CONS contract which includes a significant element of Contractor-design, tenderers will require additional data on hydrological, sub-surface and other conditions on the Site (again, to the extent that this data is relevant) in order to design and determine the details of the works for which costs are to be estimated. Tenderers for Contractor-design works require as much data as that required by the Employer's designer under CONS. They may require more data, because the Employer's designer would co-ordinate the pre-tender sub-surface investigations to suit his preferred location of each pier of a multi-span bridge, for example. In contrast, when the Employer arranges for pre-tender investigations in order to obtain the data needed by the tenderers' designers, he may find it difficult to anticipate their preferred locations.

Tenderers require considerable data for the preparation of tenders for an EPCT contract, under which the Contractor assumes much greater risks than under a CONS or P&DB contract. Since, for example, the risk of sub-surface conditions is allocated to the Contractor, each tenderer needs to assess how adverse the actual conditions may be, both in terms of working in these conditions and in terms of their effect on the design of the works. If the risk of sub-surface conditions is significant, taking account of the type of works, it may be in the Employer's interests for the contract to allocate this risk to the Employer, either by amending EPCT 4.12 or by using P&DB.

Similarly, if other EPCT-only risks are significant, the Employer should carefully consider the consequences of allocating them to the Contractor. FIDIC's publication of EPCT

如果上述分析的结果是，决定按雇主设计的方式采购工程，CONS 提供了能为国际接受的招标文件的基础。CONS 可以用于整个由雇主设计的项目，或是整个土木工程项目，或是多合同项目中的土木工程部分，尽管后一种类型可能带来重要的协调问题。如果大部分设计是由雇主(或其代表)进行的，CONS 也同样适用于多专业领域的合同。CONS 包括一些有关由承包商设计的规定，其他此类规定可容易地纳入专用条件和(或)规范要求中。

如果上述分析的结果是，决定按承包商设计的方式采购工程，可以采用 P&DB 或 EPCT，无论是采购单项生产设备、单个结构、和(或)整套设施包括根据交钥匙合同的全套设施。交钥匙合同包括为提供一个配备完善的设施("转运钥匙"时)即可运行所需大部分或全部固定件、配件和设备(简称 f.f.e.)。一个工厂可以用任一种合同条件，或设计-施工，或交钥匙合同。实际项目的具体特点对选用哪种合同条件，以及起草专用条件和其他招标文件，起着主导作用。选择由承包商设计工程的合同条件，可以看是否具备：(i) EPCT 合同需要的更为详细的数据和(或)(ii) 为收集此类数据需要的时间。

投标人需要数据以评估风险

施工合同的投标人需要研究与具体工程类型有关范围的水文和地下数据，以便计划和估算开挖和其他工程的费用。根据 CONS，这是雇主根据第 4.10 款提供此类数据的主要用途。

根据 P&DB 或 EPCT 合同，以及包括相当部分由承包商设计的 CONS 合同，投标人会要求现场的水文、地下及其他情况的补充数据(也要达到相关的范围)，以便设计和确定工程的细节，估算费用。投标人对由承包商设计的工程要求的数据，与根据 CONS 的雇主的设计人要求的同样多。他们的要求也许更多，因为，例如一个多跨度桥梁雇主的设计人会适应他选定的每个桥墩的位置，调整招标前的地下调查工作。与此对比，雇主为取得投标人的设计人所需数据安排招标前调查时，会感到难以预计他们建议的位置。

投标人为 EPCT 合同编写标书，需要大量数据，因为根据这种合同承包商比根据 CONS 或 P&DB 要承担大得多的风险。比如，因为地下情况的风险是分配给承包商的，每个投标人需要评估这些实际情况对工程施工和工程设计有何不利影响。如果地下情况的风险很大，考虑工程的类型，通过修改 EPCT 4.12，或使用 P&DB，在合同中把此项风险分配给雇主，可能符合雇主的利益。

类似地，如果仅 EPCT 分配给承包商的其他风险很大，雇主应当仔细考虑这样做的后果。