

高等学校专业英语系列教材

国际工程承包 和管理实务 —— 英语

戴若愚 编著

ENGLISH

FOR INTERNATIONAL CONSTRUCTION ENGINEERING AND MANAGEMNET



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前 言

随着改革开放的深入和经济全球化进程的加快，国内越来越多的企业和专业技术人员进入到国际工程承包领域，在不同国家从事道路、房屋、桥隧、矿产业等工程承包管理和施工工作；同时，国内的工程承包也越来越多地采用国际上的标准规范和模式。国际工程承包行业的规范性和国际性对从业人员的语言交际能力也提出了更高的要求。

与大学公共外语相比，国际工程承包行业使用的英语语体更为正式，词汇和句法结构更为繁复艰涩，术语更多，范式更为严格。工科和英语专业的学生在大学毕业进入到国际工程承包这一行业之初，对国际工程管理的语言都非常陌生，在阅读理解、写作和日常交流中困难重重，不得其法，不得不在工作中花费大量时间来熟悉、了解行业语言的特征，学习语言运用的基本技能。本书编写的目的就是针对这一问题，让学生学习国际工程承包管理中英语语言素材，接触国际工程管理方面的第一手语料，能够掌握国际工程承包管理的基本常识，熟悉国际工程英语的基本特点及语言运用的范式，从而在进入工程管理及相关行业的时候，能够尽快进入角色，发挥专业所长。

编者在本书中总结了自己多年的国际工程管理英语运用的实际经验，采用第一手国际工程管理语言运用的范例，节选改编国际工程承包管理方面的国外著述和文献，撰写编排课文，内容的重点放在国际工程承包的工作程序和合同管理上，具体分为国际工程承包现状综述、我国国际工程承包的发展历史、国际工程承包中的跨文化交际、招投标程序、国际工程承包合同的形式和格式、国际工程承包合同各方和它们的责任、工程保险和保函、工程索赔、合同争议、争议的解决和仲裁、国际工程文件管理和书面交流等十个部分。从教学体例的安排上分为工程承包管理实务英语例文、词汇和短语、国际工程承包英语的语言特征、词汇训练、翻译训练等五个部分。需要特别说明

的是教材课文来源于三个方面：一是编者自己撰写的部分和在国际工程承包实践中使用过的素材；二是改编国外顶级工程管理杂志上公开发表的文章；三是节选国际工程管理的经典文献。为了方便学生学习和读者理解，编者选出每课比较难的句子，放在第五部分翻译训练中，学生可以进行翻译训练，同时对照后面所附答案检查自己的翻译和对原文的理解水平。

应用本书教学的重点要放在国际工程承包英语常用的语言规范和模式上，并对学生的专业词汇、阅读、写作等语言运用技能进行训练，将语言输出能力的培养和国际工程承包管理的专业知识、专门技能的培养结合起来。让学生通过对该门课程的学习，初步了解国际工程承包英语的基本语言特点，明了如何正确使用语言来达到设定的交际目的，熟悉工作语言的基本范式和格式，在今后使用英语进行相关工作交流时，能够做到正确理解、表达清晰、规范专业。

本书可供大学本科三四年级和英语专业学生选修课教材使用，也可以根据学生的具体情况，用作工程管理专业的双语教材，还可供国际工程承包行业的技术、管理人员进行培训使用。

本书在编写过程中得到了西南交通大学出版基金的资助，西南交通大学外国语学院和出版社的同事给予了大力支持，中川国际的同仁提出了不少宝贵的意见，罗素常老师也为本书的编著做了大量工作，在此一并表示感谢。由于水平有限，书中难免出现疏漏或不足之处，敬请读者提出宝贵意见，以便今后改正。

编 者

2009年10月

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Chapter 1 Introduction

1.1 International Construction Market, Opportunities and Risks

International construction projects are those in which the contractor, the lead consultant, or the employer is not of the same domicile, and at least one of them is working outside his or her country of origin.

During the last decade, the world has witnessed the dramatic expansion of opportunities for contractors in international construction markets. Why do contractors wish to join in these global competitions and seek projects at any place around the world? There exists several reasons for construction firms to expand their business into international markets. These reasons include stagnant domestic markets, spreading risk through diversification into new markets, competitive use of resources, and taking advantage of the opportunities offered by the global economy.

Technological advances, political reform, worldwide trends toward privatization and an increasing recognition of economic interdependence, represent the primary forces of globalization. The global economy has created business environments that radically differ from those of the past. The globalization of construction markets now allows local construction companies to compete internationally. In addition, establishment of world standards like the International Standards Organization series has enhanced product acceptance and approval in international trade. As a result, construction firms are able to market standardized products in different countries.

Moreover, rapid developments in telecommunication, travel, and other related industries have opened the international construction markets that were open only at a local level in the past.

Finally, new information technology that provides fast data exchange at a low cost is bringing about new organization structures. It is no longer necessary to set up extensive local management offices, which significantly reduces overhead expenses.

Meanwhile, employer/employers worldwide, be they government institutions or private organizations, welcome this global selection of contractors, which would optimize the investment and obtain possibly the best service around the world.

Therefore, “going global”, the act of globalization is a universal theme quoted by all the major contractors throughout the world. Marketing activities are carried out globally to secure the most profitable work which matches the construction firms’ resources, and which would yield the best output in the most appropriate ways regardless of the work’s geographical location and the different modes of participation in the implementation of the projects.

However, risks always stay at where opportunities abound. In general, an international contractor, when tendering and pursuing a project overseas, has to face political, economic, cultural/legal, tech/construction and other risks. To be more specific, those shall include the following:

1. Political risks: *Expropriation, War/Riot, Government Control, Repudiation, Government Subsidy, Relationship with Government, Government Action & Regulation.*
2. Economic risks: *Currency Exchange, Currency Restriction, Inflation, Burden of Financing, Tax Discrimination.*
3. Cultural/Legal risks: *Cultural Differences, Language Barrier, Different Applicable Law, Different Dispute Resolution, Force Majeure, Protection of Proprietary Information.*
4. Tech/Construction risks: *Difference in Geography, Labor Issues (skill, strike, etc.) , Material Availability, Sub-contractor Availability, Different Standard, Different Measurement System, Domestic Requirement.*
5. Other risks: *Lack of Management Skill, Lack of Experience, Warrantee Issue, Import/Export Regulation, Technology Transfer, Lack of Infrastructure, Public Resistance, Environmental Issues.*

In the face of risks and opportunities, international construction firms/contractors should make full use of their resources available, initiate multi-dimensional marketing activities, conduct thorough investigations to assess and evaluate a project's macro and micro environment, take consideration of all the advantages and disadvantages involved in a proposed procurement, and make the right decision. For the past decade, we have seen the glory of some contractors pocketing greasy profit from country to country, and we have also witnessed the decline of many famous contractors from renown to oblivion. International construction is in general complex and risky unless handled appropriately and in a professional way.

(Abridgement based on Seung H. Han & James E. Diekmann, Approaches for Making Risk-based Go/No-go Decision for International Projects, 300, Journal of Construction Engineering and Management, July/August, 2001.)

1.2 Project Delivery Process in International Construction

It is quite necessary that we understand the basic and most elementary procedures adopted in the general practice of international construction projects. In the first place, an international procurement process involves at least three parties, i.e., the Employer, the Consulting Engineer, and the Contractor. In addition to those three, sometimes the financier or donor (if employer is not the one who supplies funds needed for the project) also participate into this system to supervise and monitor the utilization of the project funds. The activities of these parties to an international project formulate the project implementation circle that encompasses each and every step taken in the delivery/procurement process.

In general, the project delivery/procurement procedures include the following three stages:

Preparatory Stage: the Employer makes a project proposal, and employs a professional firm for draft of cost plan and schedule, with which he either completes the internal formalities required for acquisition of funds or goes to external entities for assistance in finance. When the financial resources are secured, the professional firm will develop the contract procurement strategy, and prepare construction cost estimate, contract drawings, and specifications under the supervision of the employer.

Tendering Stage: when the conditions of contract, drawings and specifications, and other project documents are ready, prequalification of contractors is initiated to evaluate the integrity, financial and technical strength of the potential contractors and Invitations for Bids are issued to those prequalified only. After estimation, evaluation, authentication of the bidding documents submitted in the bid process, the contract is awarded to the chosen contractor or contractors.

Construction Stage: upon the receipt of Letter of Acceptance and Notice for Commencement of Works, the contractor shall start the mobilization of his personnel and equipment to site, and embark on the construction works pursuant to the work plan and program schedule submitted and approved by the Engineer; when the work is sectionally or substantially completed, the Engineer shall test and inspect the work so completed and the Taking Over Certificates shall be issued to the Contractor if the work are constructed to the satisfaction of the engineer; and the Defects Notification Period is thus enacted, during which time the contractor shall rectify and make good all the defects as being noted in the defects list or as may appear; upon the expiry of Defects Notification Period and the completion of rectification of defects, Performance Certificate (Certificate of Completion) shall be issued to certify that the construction works is completed.

International construction project demands team work involving the participation of different parties, and they may come from different countries with different cultural backgrounds and practices. To ensure the each project delivery/procurement procedure is carried smoothly and without obstruction, the exchange of information among the different parties involved seems critical and essential in the inter-cultural communication in international construction projects.

1.3 Communication, a Priority

Construction industry is one of the most important components in national economy. The industry itself, together with all those closely related, absorbs the biggest number of labour force. Whether one is an employee for materials supplier, or equipment and parts manufacturer, or real estate developer, he is among many others who should face the standard operation procedures and practices of international construction engineering. With China's entry into WTO and more Chinese

contractors going global, knowledge and understanding of international construction know-how are critical and essential for anyone who wishes to join in the trend of globalization.

The history of international construction engineering is a successive process of standardization of operation procedures. Once the contract is signed, all the project activities shall proceed in accordance with the delivery procedures and principles specified in the contract documents. Thus, all the parties to the project, in general the employer, the consulting engineers, and the contractor, are required to observe the rule set, to respect every clauses in the Contract signed and to fulfill their duties and obligations under the Contract. Communication among the parties, being part of the project activities, shall also follow suit.

In general, communication at an international project shall comprise the following.

1. Technical writing.
2. Interpersonal communication.
3. Writing decision memoranda.
4. Writing project reports/studies.
5. Formal presentation skills.
6. Effective briefing techniques.
7. Media relation techniques.

In the management of all the above communications, the language through which the specific messages are conveyed shall at first be standard and acceptable to the parties involved. Secondly, one should get himself properly understood, to let his working partners (on most occasions, multinational) understand exactly what he means. Therefore, communication, regularized and standardized interpersonal communication is the priority when one is using the language.

To achieve this goal, one needs to make his language simple, concise, and specific to the point. There is neither space nor need for literary description of his personal psychological feelings, lyrical exploration of the natural beauty of the project environment, or complex elaboration on the history of friendships between them. The parties the writer addresses to (such as his consulting

engineer or the employer of the project) are only interested in questions like what does the writer want by writing or talking to me? How is this writer going to accomplish a certain task? What kind of assistance/advice/instruction does the writer need to complete the task? What evidence does the writer wish to present to support his argument if he thinks he is right?

All the above goes back to one thing, the knowledge and background information on the code of language used in international construction engineering and management, which sets the primary task for this course. This course is called English for International Construction Engineering and Management. The author wishes to introduce to the students the principles and formats to follow in using English at an international construction project, and let them understand and get familiarized with those patterns that so often appear in every corner of the engineering world. By so doing, the students may have an early start when they are transplanted onto a foreign land.

As an apprentice/student/trainee on site, when it comes to work, the most important points to take note of are to listen carefully to his fellow colleagues' advice and follow attentively their model undertakings, to participate actively and voluntarily into daily construction activities, to take note of every single piece of information that may be useful in his future work, to keep proper records of site activities, daily report (like weather, the time for start and completion of work, equipment engaged in the works, employees dispatched and attended, the amount of work completed, effective working hours, site instruction received and its possible or actual influence on the sequence and efficiency of work), to interact with his supervisors and consulting engineers, and last but not the least to evaluate the work completed at the end of certain stages or periods.

Questions for discussions

Part 1

1. How does globalization affect international contractor?
2. What are the barriers or obstacles stopping contractors from going global?
3. What are the risks and opportunities for a contractor to go internationally?

Part 2

4. What are the general procedures to follow in international construction engineering?
5. In your understanding or from your experiences, what are the most important factors in the implementation of a construction project?

Part 3

6. What are major forms of communication on construction sites?
7. What do you think you should do to communicate well on site?

New Words

1. **abound** /ə'baund/vi. ~in, exist in/contain a very large number of, 大量存在, 充满
2. **acquisition** /ækwi'ziʃən/n. the act of getting land, power, money etc., 获得
3. **authentication** /ɔ:'θenti,keiʃən/ n. proving something is true or real, 鉴定, 认证
4. **defect** /di'fekt/n. a fault or a lack of something, 缺点, 过失
5. **diversification** /daivə:sifi'keiʃən/n. the increase of range of goods or services, 多元化
6. **enact** /i'nækt/vt. to make a proposal into a law, 制定法律, 通过法律
7. **entity** /'entiti/n. something that exists as a single and complete unit, 实体, 组织机构
8. **formulate** /'fɔ:mjuleit/vt. to develop something such as a plan or a set of rules, 规划, 构想, 阐述
9. **formality** /fɔ:'mæliti:/n. usually plural formalities, things you must do as formal or official part of an activity or process, 手续, 程序, 礼节
10. **globalization** /gləubəlai'zeiʃən/n. 全球化
11. **initiate** /i'niʃieit/vt. to arrange for something important to start, 开始, 发动
12. **preparatory** /pri'pærə,tɔ:ri:/adj. done in order to get ready for something, 预备的, 准备的
13. **pursuant (to)** /pə'sju:ənt/adj. according to a particular law, rule, contract etc., 依据, 按照
14. **radically** /'rædikəli/adv. big and important, 根本, 彻底, 完全的
15. **rectify** /'rektifai/vt. correct something wrong, 更正, 矫正

16. **stagnant** /'stægnənt/*adj.* not changing or making progress, 停滞, 毫无生气的
17. **utilization** /ju:'tilaɪ'zeɪʃən/*n.* use something for a particular purpose, 利用
18. **yield** /ji:ld/*vt.* to produce a result, 产生, 带来

Expressions & Terms

1. bring about 引起, 导致
2. country of origin 原产国, 来源国
3. demand for 要求
4. embark on 着手, 开始做
5. in accordance with 依据, 按照
6. multi-dimensional 多维度的
7. take advantage of 利用
8. take consideration of 考虑
9. domestic/international market 国内/国际市场
10. contractor 工程项目的承建人, 承包商
11. consultant 项目实施的监理人, 监理工程师、工程师
12. employer/owner 项目的业主雇主
13. International Standard Organization 国际标准化机构
14. overhead expense 管理费用, 管理开支/成本
15. project delivery process 项目实施过程
16. Invitation for Bids 招标邀请书, 邀请承包商参加项目投标的文件
17. Letter of Acceptance 中标函, 业主通知承包商接受投标函的正式信件
18. Conditions of Contract 合同条件, 合同文件
19. Notice for Commencement of Works 开工令, 业主或监理通知承包商开始工程实施的正式信函
20. Defects Notification Period 缺陷通知期限, 项目竣工验收后承包商应修复改正工程存在缺陷的期限
21. Taking-over Certificate 接收证书, 项目竣工验收后由监理签发的证明业主已接收完

工工程的证书

22. Performance Certificate 履约证书, 由监理签发的证明承包商已经完成合同规定各项义务的证书

23. mobilization 开工动员/进场, 指承包商在接到授标函后将项目所需的人员、设备、材料运到现场并进行相应资金安排的过程

24. prequalification 投标资格审查, 指在正式投标前, 业主/监理对拟参加投标的承包商进行资格审查并筛选出资历合格承包商准其参加投标的过程

25. procurement 采购, 也指项目实施

Linguistic Characteristics

Part 1 General Description

Any language has several distinct levels of usage. The English language, according to Martin Joos, can be classified into five stylistic levels: frozen, formal, consultative, casual, and intimate. English used in international construction engineering, a subdivision of English for special purposes (ESP), is formal and frozen in terms of its stylistic level.

The language which expresses scientific and technical concepts and theories and facts is not a different one from that of everyday conversation or literature. However, to be objective and accurate in the communication of facts in science and technology, EST writings seldom display the personal feelings of the writers or speakers, and differ from literary writing in some certain linguistic characteristics. There are much fewer rhetorical expressions like metaphors, implied meanings, exaggeration, personification, irony, or humour in EST writings, which aims at a plain, clear, concise, logical, and accurate style and structure.

As a subdivision of EST, English used in International Construction (hereinafter referred to as EIC) can be divided into two categories, one being the parole used in communication of technical information, which do not differ much from that of EST (English for Science and Technology) and

it shares all the lexical, syntactical, and rhetoric rules with EST, and another one being the language used in the stipulation, incarnation, illustration, and specification of conditions of contract or contractual obligations, which bears similarities in stylistic features to legal and business English. In addition, the communication in the international engineering world has to follow some certain patterns and adhere to some fixed formats developed from its specific context over the years. Therefore, in EIC concrete and accurate conceptual words abound, and the application of abstract and definite words, nominalization, passive voice, nonfinite verb, post attributes, and compound sentences prevail.

Read the following examples carefully and compare them with the English language you use for other purposes.

(1) Tender Security will be returned to the Tenderer 15 days after the Award of the Contract or within the period of time specified in the Tender Documents . The Tender Securities of unsuccessful Tenderers will be given back to them upon the returning of all the drawings and other related Tender Documents provided by the Owner, and the Tender Security for the successful Tender will be discharged when the Tenderer has signed the Agreement and Contract and furnished the required Performance Security.

此投标银行保函在最终确定中标单位后十五天后或投标文件规定的时间范围内返还各投标单位。具体为：未中标单位的在其退回完整的全套图纸和有关资料时予以退还；中标单位在与业主签订施工合同并提交履约保函后予以退还。

(2) Carbonate also can strongly erode bitumen materials. Carbonate can help the emulsification of bituminous materials, and eluviate out of the pavement structure, thus reduce the water stability of the bitumen stabilization or the cementing bond of the asphalt pavement.

碳酸盐类对沥青材料的侵蚀性也很强。碳酸盐可促使沥青材料乳化，并从路面结构动层中淋溶出去，从而降低沥青稳定土的水稳性或黑色路面的黏结力。