210. The Working Group agreed with that course of action. It was generally felt that during the next session the Working Group would restrict itself to determining whether decisions taken by it during its previous sessions had been reflected in the revised draft chapters before it.

The Working Group also discussed the possible duration and date of its ninth session. After deliberation, it was decided to recommend to the Commission that the session be held for a period of three weeks, during March-April 1987.

B. Working paper submitted to the Working Group on the New International Economic order at its eighth session — Draft Legal Guide on Drawing Up International Contracts for the Construction of Industrial Works: report of the Secretary-General (A/CN.9/WG.V/WP.17 and Add. 1 to 9)

[Original: English]

CONTENTS

CONTENTS	
Pe	aragraphs
[A/CN.9/WG.V/WP.17]	
DRAFT LEGAL GUIDE ON DRAWING UP INTERNATIONAL CONTRACTS FOR THE CONSTRUCTION OF INDUSTRIAL WORKS: REPORT OF THE SECRETARY-GENERAL	1-4
[A/CN.9/WG.V/WP.17/Add.1]	
INTRODUCTION	
A. Purpose and approach of Guide	1-3
B. Intended audience	4
C. Background to Guide	5-9
D. How to use Guide	10-17
1. Arrangement of Guide	10-12
2. Chapter summaries	13
3. "General remarks"	14
4. Recommendations made in Guide	15 16
5. Illustrative provisions	17
6. Terminology used in Guide	17
[A/CN.9/WG.V/WP.17/Add.2]	
CHAPTER I. PRE-INVESTMENT STUDIES	
SUMMARY	
A. General remarks	1-5
B. Opportunity studies	. 6
C. Preliminary feasibility studies	7-8
D. Feasibility studies	. 9-11
E. Detailed studies	. 12
F. Specialists performing pre-investment studies	. 13-15
CHAPTER XVIII. DELAY, DEFECTS AND OTHER FAILURES TO PER FORM (continued)	. 1-5

		Paragraphs						
CHA	PTER III. PROCEDURE FOR CONCLUDING CONTRACT (continued)	1-11						
A.	Contracting with groups of firms	2-7						
В.	Joint venture between contractor and purchaser	8-11						
[A/CI	N.9/WG.V/WP.17/Add.3]							
CHA	PTER IV. GENERAL REMARKS ON DRAFTING							
SU	MMARY							
Α.	A. General remarks							
В.	Language of contract	6						
C.	Parties to and execution of contract							
D.	Contract documents and interpretation							
E.								
F.	Definitions	20-22						
[A/CI	N.9/WG.V/WP.17/Add.4]							
СНА	PTER VIII. SUPPLY OF EQUIPMENT AND MATERIALS							
SU	MMARY							
Α.	General remarks	1-4						
В.	Supply of equipment and materials by contractor							
2.	Description of equipment and materials to be supplied	5-6						
	2. Time and place of supply	7-9						
	3. Transport of equipment and materials	10-14						
	4. Customs duties and restrictions applicable to supply	15-16						
	(a) Customs duties	15-16 17						
	5. Take-over of equipment and materials by purchaser	18-20						
	6. Storage on site	21-26						
C.	Supply of equipment and materials by purchaser	27-30						
[A / C	N.9/WG.V/WP.17/Add.5]							
СНА	PTER XXVI. SUPPLIES OF SPARE PARTS AND SERVICES AFTER CONSTRUCTION							
SU	MMARY							
A.	General remarks	1-3						
В.	Contractual arrangements	4-5						
C.	Spare parts	6-16						
D.	Maintenance	17-22						
E.	Repairs	23-30						
F.	Operation							
G.								
Н.								
I.	Termination							
J.	Remedies other than termination	40						

		Paragraph						
[A/CI	N.9/WG.V/WP.17/Add.6]							
CHAI	PTER XXIX. SETTLEMENT OF DISPUTES							
SU	MMARY							
A.	. General remarks							
В.								
C.	-							
D.	Arbitration	12-29						
	1. Arbitral proceedings	15-26						
	(a) Rules to regulate arbitral proceedings	16-18						
	(b) Appointment of arbitrators							
	(c) Language to be used in arbitral proceedings							
	(d) Place of arbitration							
	-							
Е								
E.	Judicial proceedings							
F.	Settlement of disputes by experts							
	Commencement and cessation of proceedings before expert							
	3. Mandate of expert							
G.	Disputes concerning failure of agreement or consent							
Н.	Multi-party settlement of disputes							
11.	with party settlement of disputes	30 00						
IA/CI	N.9/WG.V/WP.17/Add.7]							
_	PTER II. CHOICE OF CONTRACTING APPROACH ^a							
	MMARY							
	General remarks							
В.	Engagement of single contractor							
	1. Turnkey contract approach							
	2. Product-in-hand contract approach							
0	3. Risk and price							
C.	Engagement of more than one entity							
	 Semi-turnkey contract approach Comprehensive contract approach 							
	3. Separate contracts approach							
	4. "Fast track" contracting							
		. ~~						
[A/C	N.9/WG.V/WP.17/Add.8]							
	PTER VI. TRANSFER OF TECHNOLOGY ^b							
	MMARY							
A.	General remarks	. 1-7						
л.	Conclui contains	/						

^aThis draft chapter is a revised version of draft chapter II, "Choice of contracting approach" (A/CN.9/WG.V/WP.15/Add.8).

^bThis draft chapter is a revised version of draft chapter XXII, "Transfer of technology" (A/CN.9/WG.V/WP.45/4-18).

WP.15/Add.3).

					Paragraphs				
В.	Iss	ues co	mmor	n both to licensing and to know-how provisions	8-17				
	1.	Description of technology							
	2.	Conditions restricting purchaser in use of technology							
	3. Guarantees								
	4. Claims by third party								
C.	Iss	sue special to know-how provisions: confidentiality							
D.	Co	Communication of technical information and skills							
	1.	Supp	ply of o	documentation	21-22				
	2.	Trai	ning of	f personnel	23-29				
				17/Add.9]					
CHA	PTE	R XX	(V. 7	TERMINATION OF CONTRACT					
SU	MM.	ARY							
A.	Ge	neral	remar	ks	1-5				
В.	Ex	tent o	f term	ination	6				
C.	Gr	ounds	for te	rmination	7-25				
	1.	Unil	ateral	termination by purchaser	7-19				
			re to perform	7-14					
			(i) (ii)	Abandonment of construction	8				
			(iii)	Defective construction	9-11 12				
			(iv)	Violation of restrictions on assignment and sub-contracting	13-14				
		(b)		cruptcy or insolvency of contractor	15-18				
		(c)		ination for convenience	19				
	2.			termination by contractor	20-23				
		(a)	(i)	re to perform	20-22				
		(1.)	. ,	Interference with or obstruction of contractor's work	22				
	2			cruptcy or insolvency of purchaser	23 24-25				
_	3. Prevention of performance due to exempting impediment								
D.		stablishment of grounds for termination							
Ε.				igations of parties upon termination	27-40				
	1.								
	2.	Use and disposition of contractor's equipment and materials							
	3.		-	nt of third-party contracts and assumption of liabilities	31-32				
	4.	. Drawings, descriptive documents and similar items							
	5.			to be made by one party to other					
		(a)		nination for grounds attributable to contractor	34-35				
		(b) (c)		nination for grounds attributable to purchaser	36				
		(0)		ansing from circumstances not attributable to entier	37				
		(<i>d</i>)	Term	nination for convenience	38-39				
		(e)	Dam	ages, liquidated damages or penalties	40				
F	Sim	Survival of certain contractual provisions 4							

[A/CN.9/WG.V/WP.17]

Draft legal guide on drawing up international contracts for the construction of industrial works: report of the Secretary-General

- 1. The present report contains in its addenda a draft "Introduction" to the legal guide on drawing up international contracts for construction of industrial works (Add.1) and the following new draft chapters prepared by the secretariat: "Pre-investment studies" and proposed additions to the chapters "Procedure for concluding contract" and "Delay, defects and other failures to perform", Add.2; "General remarks on drafting", Add.3; "Supply of equipment and materials", Add.4; "Supply of spare parts and services after construction", Add.5; and "Settlement of disputes", Add.6.
- 2. The chapters have the titles and and numbers assigned to them in the revised structure of the legal guide as approved by the Working Group at its seventh session. However, in the exercise of the discretion given to the secretariat it was considered advisable to change the title of chapter I to "Pre-investment studies" and to place the discussion of the issues concerning the selection of parties, in particular contracting with consortia and joint ventures in the chapter, "Procedure for concluding contract". It was also considered advisable to place the issues connected with the relevance of information based on pre-investment studies for the liability of parties in the chapter, "Delay, defects and other failures to perform".
- 3. In addition to the new draft chapters, the report contains revised draft chapters on "Choice of contracting approach", Add.7; "Transfer of technology", Add.8; and "Termination of contract", Add.9. These draft chapters are revisions of documents A/CN.9/WG.V/WP.15/Add.8 and Add.4, and A/CN.9/WG.V/WP.9/Add.5, respectively.
- 4. At a previous session of the Working Group the question was raised whether the term "purchaser", or another term, should be used in the legal guide to indicate the party for whom the works is to be erected. The term "purchaser" has been used in the draft chapters for the following reasons. First, the term is sometimes used in practice, including, for example, in other United Nations documents concerning the construction of industrial works.3 Second, the term seemed preferable to other terms sometimes used in practice, such as "owner", "employer" or "client", since these terms connoted legal relationships between the parties which differ from the legal relationship between parties to a works contract. The term "purchaser" should create no implication that a works contract is in the nature of a sales contract, in which the relevant party is more often referred to as the

"buyer" (e.g. in the United Nations Convention on Contracts for the International Sale of Goods, Vienna, 1980), in particular because the term "contractor" is used in the legal guide to indicate the other party to the works contract.

[A/CN.9/WG.V/WP.17/Add.1]

Introduction

A. Purpose and approach of Guide

- 1. The purpose of this Guide is to assist persons involved in the negotiation and drawing up of international contracts for the construction of industrial works. These contracts are typically of great complexity, both with respect to the technical aspects of the construction and the legal relationships between the parties. The obligations to be performed by contractors under these contracts will normally extend over a relatively long period of time - often several years. Contracts for the construction of industrial works therefore differ in important respects from traditional contracts for the sale of goods or the supply of services in ways that may be unfamiliar to many persons. Consequently, rules of law drafted to govern sales or services contracts cannot settle in an appropriate manner issues arising in contracts for the construction of industrial works. These issues should therefore be settled by the parties through contract provisions. The preparation of this Guide was largely motivated by an awareness that the complexities and technical nature of this field often made it difficult for purchasers of industrial works, particularly those from developing countries, to acquire the necessary information and expertise required to draw up appropriate contracts. The Guide has therefore been designed to be of particular benefit to those purchasers, while seeking at the same time to take account of the legitimate interests of contractors.
- 2. The Guide seeks to assist parties in negotiating and drawing up international contracts for the construction of industrial works by identifying the legal issues involved in those contracts, discussing possible approaches to the solution of the issues, and, where appropriate, suggesting solutions which the parties may wish to incorporate in their contract. The discussion in the Guide and the solutions recommended are written in the light of the differences between the various legal systems in the world. It is hoped that one result of the Guide will be to promote the development of an international common understanding as to the identification and resolution of issues arising in connection with those contracts.
- 3. The Guide deals with contracts in which the contractor assumes the obligation to supply equipment and materials to be incorporated in the works, and either to erect the works or to supervise such erection by others. For brevity, these contracts are referred to in the Guide as "works contracts". In addition to the obligations just

¹A/CN.9/262, paras. 95-99.

²A/CN.9/234, para. 13.

³For example, in the "General conditions for the supply and erection of plant and machinery for import and export", Nos. 188A and 574A, of the United Nations Economic Commission for Europe, and in the "UNIDO model form of turnkey lump-sum contract for the construction of a fertilizer plant" (UNIDO/PC.25).

mentioned, which are the essence of a works contract, a contractor often assumes other important obligations, such as the design of the works, and the transfer of technology.

B. Intended audience

4. The Guide has been designed to be of use to persons involved at various levels in negotiating and drawing up works contracts. It is intended for use by lawyers representing the parties, as well as non-legal staff of and advisers to the parties (e.g. engineers) who participate in the negotiation and drawing up of the contracts. The Guide is also intended to be of assistance to persons who have overall managerial responsibility for the conclusion of works contracts, and who require a broad awareness of the structure of those contracts and the principal legal issues to be covered by them. Such persons may include, for example, high level officials of a government ministry under the auspices of which the works is being constructed. It is emphasized, however, that the Guide should not be regarded by the parties as a substitute for obtaining legal and technical advice and services from competent professional advisers.

C. Background to Guide

- 5. In 1974 and 1975, the United Nations General Assembly, at its sixth and seventh special sessions, adopted certain resolutions dealing with economic development and the establishment of a new international economic order. As one of the organs of the United Nations, the United Nations Commission on International Trade Law (UNCITRAL) was called upon by the General Assembly to take account of the relevant provisions of those resolutions. It responded by including in its programme of work the topic of the legal implications of the new international economic order, and considered how, having regard to its special expertise, and within the context of its mandate, it could most effectively advance the objectives set forth in the General Assembly resolutions. In doing so it also took into account a recommendation of the Asian-African Legal Consultative Committee (AALCC) that the Commission should deal with this topic.2
- 6. To assist it in defining the nature and scope of possible work in this area, the Commission in 1978 established a Working Group on the New International Economic Order, and charged it with the task of making recommendations as to specific topics which could appropriately form part of the programme of work of the

¹Report of the United Nations Commission on International Trade Law on the work of its eleventh session, Official Records of the General Assembly, Thirty-third Session, Supplement No. 17 (A/33/17), paras. 67(c)(vi), 68, 69.

²This recommendation is set forth in Recommendations of the Asian-African Legal Consultative Committee: note by the Secretary-General, A/CN.9/155, Annex (Ibid., Volume IX: 1978, Part Two, IV, B); see, also, Legal implications of the new international economic order: note by the secretariat, A/CN.9/194.

Commission.³ The Working Group, aided by studies prepared by the Secretary-General, submitted to the Commission a list of several possible topics and reported that its discussions had revealed that, of this list, a study of contractual provisions commonly occurring in international industrial development contracts would be of special importance to developing countries, in view of the role of industrialization in the process of economic development.⁴ Based upon the discussions and conclusions of the Working Group, the Commission in 1980 decided to accord priority to work related to contracts in the field of industrial development. It assigned this work to the Working Group, and enlarged the composition of the Working Group to consist of all 36 States members of the Commission.⁵ In 1981 the Commission instructed the Working Group to prepare a Legal Guide on Drawing Up International Contracts for the Construction of Industrial Works.⁶

- 7. Work leading to the preparation of the Guide progressed in two stages. In the first stage, which was carried out in 1981 and 1982, the secretariat prepared for the Working Group a study of clauses commonly found in international contracts for the construction of industrial works. At sessions of the Working Group views were expressed regarding the various issues presented in the study, and possible solutions to these issues were discussed. The purpose of this discussion was to provide guidance to the secretariat when it commenced the drafting of the Guide.
- 8. Once this stage of the work had been completed, the Working Group in 1982 instructed the secretariat to begin work on the second stage, namely, the drafting of chapters of the Guide. The secretariat prepared initial draft chapters of the Guide in consultation with experts in the field of industrial works contracts, and submitted these drafts to the Working Group. The draft chapters were revised by the secretariat in the light of the views expressed and decisions taken by the Working Group. After all the draft chapters of the Guide had been examined by the Working Group, revised by the secretariat, and examined by the Working Group a second time, the draft Guide was submitted to the Commission for adoption. The Legal Guide was adopted by the Commission at its session in8
- 9. In the preparation of the Guide numerous materials, including books, articles and other textual materials, as

⁴Report of the Working Group on the New International Economic Order on the work of its session, A/CN.9/176, paras. 31 and 32.

⁵Report of the United Nations Commission on International Trade Law on the work of its thirteenth session Official Records of the General Assembly, Thirty-fifth Session, Supplement No. 17 (A/35/17), para. 143.

⁶Report of the United Nations Commission on International Trade Law on the work of its fourteenth session Official Records of the General Assembly, Thirty-sixth Session, Supplement No. 17 (A/36/17), para. 84.

Report of the Working Group on the New International Order on the work of its third session, A/CN.9/217, para. 130.

⁸Report of the United Nations Commission on International Trade Law on the work of its ... session, Official Records of the General Assembly, Session, Supplement No. 17 (A/./17), para. ...

³Report of the United Nations Commission on International Trade Law on the work of its eleventh session, fn. 1, above, para. 71; Report of the United Nations Commission on International Trade Law on the work of its twelfth session, Official Records of the General Assembly, Thirtyfourth Session, Supplement No. 17 (A/34/17), para. 100.

well as model forms of contract, general conditions of contract and contracts actually entered into have been consulted. Such materials are too numerous to be able to acknowledge them individually; however, recognition is hereby given to the contributions made by this growing body of literature to the area of international works contracts.

D. How to use Guide

1. Arrangement of Guide

- 10. The Guide is arranged in two parts. Part One deals with certain matters arising prior to the time when the contract is drawn up. These include the identification of the project and its parameters through feasibility studies, and the possible legal character of the parties (chapter I); the various contracting approaches which the parties may adopt (e.g. turnkey, comprehensive, product-in-hand, semi-turnkey or separate contracts approaches) (chapter II); the possible procedures for concluding the contract (i.e. tendering, or negotiation without prior tendering), and the form and validity of the contract (chapter III). The discussion of these subjects has two aims: to direct the attention of the parties to important matters which they should consider prior to commencing to negotiate and draw up a works contract, and to provide a setting for the discussion of the legal issues involved in the contract.
- 11. Particular notice may be taken of the discussion in chapter II of the various possible approaches to contracting. The settlement of certain issues in the contract may depend upon the contracting approach which is adopted by the parties; and throughout the Guide, whenever appropriate, the discussion points out the different situations or solutions which may apply under different contracting approaches.
- 12. Part Two of the Guide deals with the drawing up of specific provisions of a works contract. It discusses the issues to be addressed in such provisions and in many cases proposes approaches to the treatment of those issues. Part Two is thus the core of the Guide. Each chapter in Part Two deals with a particular issue which is usually addressed in a works contract. To the extent possible, the chapters have been arranged in the order in which the issues dealt with in those chapters are frequently addressed in a works contract.

2. Chapter summaries

13. Each chapter of the Guide is preceded by a summary of the chapter. The summaries are designed to serve the needs of management or other non-legal personnel who need to be aware of the principal issues covered by a particular type of contract clause, but who do not require a discussion of the issues in the depth or detail contained in the main text of a chapter. Such readers might obtain information which they require about the settlement of issues arising in the contract as a whole or in particular types of clauses by reading the summaries alone. To assist such readers who find that they would like further

information on particular points, cross-references are provided to paragraphs in the main text of the chapter where points referred to in the summary are discussed. Persons directly involved in drawing up works contracts, for whom the main text of each chapter is principally designed, might find reading the summaries to provide a useful overview of the subject-matter and issues covered by each chapter. They might also use the summaries as a check-list of issues to be addressed in negotiating and drawing up contractual provisions.

3. "General remarks"

14. The main text of each chapter begins with a section entitled "General remarks". This is intended to serve as an introduction to the subject-matter of the chapter, and to cover certain matters which are applicable to the chapter as a whole so as to avoid repeating them in each section of the chapter where they are relevant. In some cases the section also deals with points which do not easily fit elsewhere within the structure of the chapter. The section often refers readers to other chapters where matters related to the chapter in which the section appears are discussed.

4. Recommendations made in Guide

15. Where appropriate, the Guide contains recommendations as to ways in which certain issues in a works contract might be settled. These are simply suggestions which the parties may wish to take into consideration in the light of their particular contract and their respective needs and objectives. Such recommendations, including those that advise that the parties "should" take a particular course of action, are not intended to indicate that a particular approach is legally required, or is the only possible course of action. Any recommendation made in the Guide will of course have effect only to the extent that the recommendation is incorporated by the parties in their contract.

5. Illustrative provisions

16. Some chapters contain one or more "illustrative provisions" set forth in footnotes. They are included in order to make issues discussed in the text of a chapter easier to understand. They also serve to illustrate how certain solutions discussed in the text, particularly those that are complex or may otherwise present difficulties in drafting, might be structured. It is emphasized, however, that illustrative provisions should not necessarily be regarded as models of provisions which should be included in particular contracts. The precise content and language to be used in a clause may vary with each contract. In addition, there is usually more than one possible solution to an issue, even though only one of those alternatives is presented in an illustrative provision. The illustrative provisions have been designed to fit within the overall scheme followed and approaches taken in the Guide. It is therefore important that parties who draft a provision for their contract based upon an illustrative provision should carefully consider whether the provision as drafted fits harmoniously within their own contract. In general, illustrative provisions have not been included where an understanding of an issue and guidance to drafting is clearly obtainable from the text of the chapter.

6. Terminology used in Guide

17. Certain terms used in the Guide have been used with particular meanings. The definitions given below are intended to assist in the understanding of those terms. Chapter IV, "General remarks on drafting", contains a list of terms and their definitions which the parties might use in the contract. Other terms (e.g. "hardship" or "variation") are defined in the chapters where the subject-matter covered by those terms is dealt with. The detailed alphabetical index located at the end of the Guide may also assist the reader in understanding terminology used in the Guide by referring to paragraphs where the particular terms are used and discussed.

Applicable law

"Applicable law" includes not only the legal rules which govern the mutual contractual rights and obligations of the parties (referred to in this Guide as the "law applicable to the contract": see chapter XXVIII, "Applicable law"), but other legal rules, of whatever nature, relevant to the legal relationship between the parties (e.g. procedural rules, administrative rules, or rules relating to the settlement of disputes).

Clause

"Clause" is a collection of provisions which deals with a certain major topic in the contract (e.g. a clause dealing with variations, or with the settlement of disputes).

Time of conclusion of the contract

"Time of conclusion of the contract" is the time when the contract becomes binding upon the parties (as distinct from the time when the parties are obligated to commence performance of the contract).

Construction of the works

"Construction of the works" may include supply of the design of the works, supply of equipment and materials to be incorporated in the works, and construction on site (i.e. civil engineering, building or erection of equipment).

Contractor

"Contractor" is the party to the contract who is to supply equipment and materials and erect the works or supervise such erection by others.

Mandatory rules of law

"Mandatory rules of law" are legal rules in force within a legal system, whether by virtue of statute, administrative regulation or otherwise, from which the parties may not by agreement derogate.

Provision

"Provision" is a portion or section of a contract clause which deals with a particular issue in the clause.

Purchaser

"Purchaser" is the party to the contract for whom the works is to be erected.

[A/CN.9/WG.V/WP.17/Add.2]

Chapter I. Pre-investment studies

Summary

Pre-investment studies enable the purchaser to decide whether to proceed with investment in an industrial works and to determine the nature and scope of the works. They are usually carried out by the purchaser, or by a consultant engaged by him (paragraphs 1 and 2).

Pre-investment studies may include opportunity studies (paragraph 6), preliminary feasibility studies (paragraphs 7 and 8), feasibility studies (paragraphs 9 to 11) and detailed studies (paragraph 12).

The consultant to perform pre-investment studies may be selected through pre-qualification and competitive tendering or by negotiation without prior tendering (paragraph 13). The purchaser should consider whether it is desirable for the consultant who makes the pre-investment studies to be engaged subsequently to supply the design for the works or to serve as the consulting engineer, or for a potential contractor who makes the studies to be engaged as the contractor under a works contract (paragraphs 14 and 15).

A. General remarks

1. A purchaser contemplating investment in an industrial works will have to acquire and analyse a large amount of technical, commercial, financial and other information in order to be able to decide whether to proceed with the investment, and to determine the nature and scope of the works. That information is acquired and analysed in the context of one or more studies, referred to in this Guide as "pre-investment studies". Pre-investment studies are in most cases carried out by or on behalf of the purchaser. Sometimes, however, they are carried out by the contractor (see paragraph 15, below). In some countries, particularly those in the process of industrialization, pre-invest-

¹For a discussion of the content and methodology of pre-investment studies, see *Manual for the Preparation of Industrial Feasibility Studies* (United Nations publication, Sales No. E.78.II.B.5).

ment studies may also constitute an element of the country's overall planning process by enabling the country to compare and evaluate various potential industrial projects in order to determine its investment priorities.

- 2. Pre-investment studies are not only essential decision-making tools for the purchaser, they are often required by lending institutions which provide financing for the construction of industrial works. Those institutions sometimes even participate in or carry out pre-investment studies themselves.
- 3. The works contract will not require pre-investment studies to be made since they will have already been made by the time the purchaser is ready to conclude the contract. However, since the studies may contain information which might be made available by the purchaser to the contractor, the works contract may deal with the responsibility of the parties for the accuracy and sufficiency of that information. Contractual provisions in this regard are discussed in chapter XVIII, "Delay, defects and other failures to perform".
- 4. Pre-investment studies are often carried out in stages, the results of the study in one stage providing the basis for a decision whether to proceed to the study in the next stage and serving as the foundation for that study. The nature and sequence of those studies are typically as set forth in the following paragraphs.
- 5. Purchasers should be aware that an attempt to economize through studies which are inadequate could result in false savings, since this may result in the making of an improper investment decision, or having to vary the design of the works or construction methods during construction in order to conform to circumstances which were not known or were erroneously forecast as a result of the feasibility study.

B. Opportunity studies

6. These studies are often carried out by countries in the process of industrialization. They are designed to identify potential investment opportunities within the country to be pursued either by the government itself or to be proposed to potential independent investors in investment promotion programmes. The studies may explore, for example, various possibilities for constructing works to manufacture a particular product which the government is interested in producing locally, and the potential market for the product. They may explore possibilities for constructing works to make use of locally available resources or to promote industrialization in a particular region. Opportunity studies usually deal only with the principal economic and technical aspects of various potential investment opportunities, without attempting to define the parameters of a particular project in detail.

C. Preliminary feasibility studies

7. When the purchaser has begun to focus upon a particular project, he will engage in studies aimed at

- ascertaining the technical and financial viability of the project. Full-scale feasibility studies (discussed in paragraph 9 to 11, below) are often costly; in some cases, therefore, the purchaser may wish to engage in a preliminary feasibility study in order to determine whether a full-scale feasibility study is warranted. In other cases, the purchaser may wish to by-pass the preliminary study and proceed directly with the feasibility study. This might be the case, for example, when the purchaser can conclude on the basis of an opportunity study that the feasibility study is justified.
- 8. The preliminary feasibility study should enable the purchaser to determine on a general basis the viability of the project. It will often investigate many of the same matters and address many of the same issues as does the feasibility study (see paragraph 10, below), although in less detail. The preliminary feasibility study will often enable the purchaser to evaluate various options concerning the scope and the manner of execution of the project. It may also point out particular matters requiring more detailed investigation and help to determine the nature of investigations and tests to be conducted in the context of the feasibility study. On the basis of the preliminary feasibility study the purchaser might approach potential sources of financing for the project. The purchaser may wish to do so prior to the full-scale feasibility study in particular because some lenders wish to have their terms of reference incorporated in the feasibility study, and sometimes to have their own experts involved in the study.

D. Feasibility studies

- 9. The feasibility study should be designed so as to provide the purchaser with the information which he needs in order to decide whether to invest in the project and, if he decides to do so, to settle upon the parameters of the works to be constructed (e.g. its size, location, cost, production capacity, and perhaps the possible technologies which may be used), the source and method of financing, the contracting approach to be used (e.g. product-in-hand contract, turnkey contract, comprehensive contract, semi-turnkey contract or separate contracts approach: see chapter II, "Choice of contracting approach"), and the method of obtaining offers from contractors (e.g. by tender or by negotiation: see chapter III, "Procedure for concluding contract"). The lending institution which is to finance the construction of the works may collaborate in the making of these decisions on the basis of the feasibility study.
- 10. The exact scope and contents of the feasibility study will depend on the project concerned. However, feasibility studies typically cover the following matters and issues: the potential market size and potential market price for the product to be produced by the works; the capacity of the works; raw materials, power and other inputs for the manufacturing process; the location and site of the works; transport and other elements of infrastructure; civil, mechanical and electrical engineering; technology; organization of the works and overhead

costs; manpower requirements; and legal constraints (e.g. land-use requirements and environmental controls). The feasibility study should contain an analysis of the financial viability of the works, including the total investment required, possibilities concerning the financing of construction and the commercial profitability of the works. It may also evaluate the project in relation to the national economy. The feasibility study will usually also include an investigation of the site to determine its topography and geological characteristics.

11. Feasibility studies typically assume the existence of certain situations or facts, such as the availability or cost of construction materials. The purchaser should be able to ascertain from the study the assumptions which have been made and the risk that the real situations or facts are different from those assumed. The purchaser should determine which of these risks he might require the contractor to undertake, bearing in mind the cost to him of the contractor undertaking the risks. Sometimes feasibility studies include "sensibility studies", which vary some of the assumptions on which the feasibility study is based to determine the effect of those changes in assumptions on the feasibility of the project.

E. Detailed studies

12. A detailed study is sometimes conducted prior to entering into the works contract or to soliciting offers in order to settle final details of the works and of construction methods, as well as the nature and number of contracts to be entered into.

F. Specialists performing pre-investment studies

- 13. Pre-investment studies are usually made by a team composed of specialists in various relevant disciplines, e.g. economists, financial experts, geologists, engineers and industrial management experts. Since purchasers often do not possess all of the required expertise within their own staff, it is common for consulting firms to be engaged to conduct the studies. These consultants may be selected through pre-qualification and competitive tendering procedures or by negotiation without prior tendering. Some international lending institutions require the consultant to be chosen by pre-qualification and tendering. Consultants are often engaged under contracts which define in detail the rights and obligations of the parties and which address many of the same issues as those addressed in the contract for the construction of the works.2
- 14. The purchaser should consider whether the consultant who conducts the pre-investment studies should subsequently be engaged to supply the design for the works or to serve as the consulting engineer (see chapter X, "Consulting engineer"). On the one hand, if the consultant who makes the studies believes that he might

²See Manual on the Use of Consultants in Developing Countries (United Nations publication, Sales No. E.72.II.B.10).

be engaged to perform such additional functions, he might be tempted to produce studies which are more encouraging to the purchaser to proceed with the project than is justified. On the other hand, when the consultant who supplies the design for the works is different from the consultant who did the pre-investment studies, he may have to spend time examining the studies in detail, and perhaps even duplicate some investigations made for the studies, resulting in higher cost to the purchaser. This would not be the case if the design were produced by the same consultant who made the studies. Some international lending institutions will not allow the consultant who made the pre-investment studies to serve as the supplier of the design or as the consulting engineer.

15. Sometimes, and in particular when a turnkey contract is contemplated, feasibility studies and other preinvestment studies are made by a potential contractor. In some cases the contractor takes the initiative in proposing the studies to the purchaser with a view towards showing that the works is feasible and profitable so that the purchaser will contract with him for the construction of the works. The advantages and disadvantages of having the pre-investment studies made by the contractor are the same as when the studies are made by a consultant who supplies the design for the works or serves as the consulting engineer. If the studies are made by the contractor, the purchaser may wish him to accept full responsibility for the results of the studies and the conclusions appearing in them as to the feasibility of the project including, for example, the availability of raw materials and the marketability of projected levels of output of the works. If the studies are made by a consultant, on the other hand, he may assume responsibility only for making the studies competently, without guaranteeing their results. If the pre-investment studies are made by a contractor, the purchaser may wish to have the studies reviewed by an independent specialist. Some lending institutions will not allow the entity who made the pre-investment studies to serve as the contractor.

Chapter XVIII. Delay, defects and other failures to perform (continued)³

Responsibility for information needed for construction of the works

1. When the purchaser solicits offers for the construction of the works (see chapter III, "Procedure for concluding contract") he may communicate certain information to potential contractors concerning conditions at the site or other information which will affect the construction of the works. Some of this information may

³The following material is included in this addendum because of its relationship with the material on pre-investment studies, although its scope is not limited to that subject. It will be incorporated in chapter XVIII, "Delay, defects and other failures to perform" (see A/CN.9/WG.V/WP.11/Add.2 and Add.3), with appropriate headings and numbering.

have been obtained by the purchaser in the pre-investment studies (see chapter I, "Pre-investment studies"). In some cases, the contract might presuppose that the purchaser has provided particular types of information, such as information concerning conditions at the site.

- 2. Contractors, in preparing their offers, will perform certain investigations in order to obtain information concerning matters affecting the performance to be required under the works contract, and which they will therefore need as a basis for their offers. However, such investigations are often limited, since contractors cannot incur the expense of extensive investigations when they are not assured of being engaged by the purchaser. In addition, contractors may have only a relatively short period of time within which to prepare and submit their offers to construct the works (see chapter III, "Procedure for concluding contract"). To the extent that the purchaser provides information to the contractor, and to the extent that the contractor is able to rely on that information, the contractor may be freed from having to perform the investigations necessary to acquire it himself. This could result in financial savings to the purchaser if the purchaser could acquire the information at a lesser cost than could the contractor or if the contractor could offer to construct the works at a lower price by virtue of having more precise information as to conditions affecting the construction. The works contract should allocate between the parties responsibility for information upon which the contractor's offer is based, and responsibility for the discovery after the conclusion of the contract of conditions which were not known or taken into account when the contract was concluded.
- 3. The parties should consider the most appropriate way to allocate responsibility for the sufficiency and accuracy of the information. Under one approach, various types of information would be considered individually in order to determine the most appropriate allocation of that responsibility. In making that determination the parties might consider such factors as which party can more easily and at least cost obtain the information and bear the risk of any inadequacy or error in the information, and which party can more easily control the sufficiency and accuracy of the information. Information for which one party or the other might be specifically allocated responsibility might include, for example, conditions at the site (e.g. topography, climate), the nature of the technology that might be used in the works, and environmental and other legal regulations which might affect the construction of the works.
- 4. A lump-sum contract (see chapter II, "Choice of contracting approach") would provide that the purchaser was to bear the costs of any additional work required to be performed by the contractor as a result of insufficiency of or errors in the information for which the purchaser is responsible. In a cost-reimbursable or unit-price contract, those costs would be borne automatically by the purchaser; however, such contracts might provide that those costs were not to be taken into account in determining whether a cost ceiling had been reached. A variation of

- that approach, irrespective of the method of pricing used in the contract, might require the contractor to examine the information provided by the purchaser for any apparent inconsistencies or other errors prior to the conclusion of the contract, and to notify the purchaser of any errors at that time. The contract might also provide that the contractor was to bear the costs of additional or unnecessary work occasioned by any errors in the information which he had failed to notify to the purchaser.
- 5. Under a second approach, the contractor would be required to make himself aware of any information or situations which were reasonably discoverable or foreseeable by him, and to bear the costs of additional work required as a result of a failure to discover such information or situations, with the purchaser assuming the costs resulting from the existence of information or situations which were not reasonably discoverable or foreseeable. The provision of information by the purchaser to the contractor would not free the contractor from his responsibility to obtain all necessary discoverable or foreseeable information, even if that required duplicating investigations performed by the purchaser. The provision of information by the purchaser could make certain information or situations foreseeable which would not otherwise be foreseeable. Under a third approach, the contractor would be responsible for all information which he needed in order to perform the contract, and would bear the cost of any additional work required due to the insufficiency or inaccuracy of any information or the existence of conditions not foreseen at the time the contract was entered into.

Chapter III. Procedure for concluding contract (continued)⁴

1. A purchaser may contemplate entering into a contract with a group of firms, rather than with a single firm. He may also contemplate entering into a joint venture with the contractor. This Guide does not deal in depth with the legal issues connected with arrangements of these types.⁵ The purpose of the discussion of these

⁴The following material had been proposed to be incorporated in chapter I of the Guide together with the material on pre-investment studies (see "Revised draft outline of the Guide", A/CN.9/WG.V/WP.15/Add.7). Since the relationship of this material with the material on pre-investment studies is slight, it is now proposed to separate them, and incorporate the following material in chapter III, "Procedure for concluding contract" (see A/CN.9/WG.V/WP.15/Add.10), with appropriate headings and numbering.

⁵Issues relating to groups of firms acting as contractors are discussed in Guide for Drawing up International Contracts between Parties Associated for the Purpose of Executing a Specific Project (United Nations publication, Sales No. E.79.II.E.22) and in Guide on Drawing up Contracts for Large Industrial Works (United Nations publication, Sales No. E.73.II.E.13). Joint ventures between contractors and purchasers are discussed in Manual on the Establishment of Industrial Joint-Venture Agreements in Developing Countries (United Nations publication, Sales No. E.71.II.B.23).

arrangements in the present chapter is to bring them to the attention of the parties and to point out some of the principal issues associated with them which the parties may wish to consider.

A. Contracting with groups of firms

- 2. The construction of a complex and large-scale industrial works is often beyond the technical or financial means or the experience of a single contractor. This may be the case in particular where all or a substantial part of the works is to be constructed under a single contract, as in the product-in-hand contract, comprehensive contract, and turnkey contract approaches (see chapter II, "Choice of contracting approach"). In such a case one possibility may be for a single firm to enter into the contract as the contractor, and to engage subcontractors in order to perform those obligations which he cannot himself perform (see chapter XI, "Subcontracting"). Another possibility may be for a group of firms to combine and with their collective expertise and resources to perform the obligations of the contractor. In addition, groups of firms may be created for the purpose of constructing the works in order to satisfy eligibility requirements (e.g. those concerning the nationality of the contractor) which may be imposed by law, by the purchaser or by an international lending institution, or in order to take advantage of financial benefits available to contractors meeting certain nationality requirements.
- 3. The terminology used to refer to a group of firms acting as the contractor is not settled. In practice, the terms "consortium" and "joint venture" are often used. Sometimes, "consortium" is used to refer to a group in which the various elements of the construction of the works are specifically allocated among separate firms which are members of the group by an agreement among the members, and in which under the agreement and under the works contract with the purchaser each member is responsible only for the performance of the obligations allocated to him. The term "joint venture" is often used to refer to an arrangement by which two or more separate firms combine to form a business unit, and the obligations of the contractor under the works contract are performed by the unit, it being agreed among the firms which are members of the unit and in the works contract with the purchaser that each member is jointly and severally responsible for the full performance of those obligations. Units of that nature may be organized as independent legal entities, but usually are not. An arrangement sometimes known as a "silent" consortium or joint venture may exist when only one firm enters into a contract with the purchaser but has an arrangement with other firms concerning the allocation of the various obligations of the contractor. The purchaser may or may not be aware of the arrangement. In such a case the purchaser may claim performance only by the firm which entered into the contract.

- 4. The organization and management of the group and the division of responsibility among members of the group is determined principally by the agreement among the members and by the law governing the agreement. However, various aspects of the agreement will have consequences with respect to the performance of the contract for the construction of the works. The purchaser should take these aspects into consideration in connection with the works contract.
- 5. The purchaser may enter into a contract with a group of contractors in various ways. If the group is organized as an independent legal entity, the purchaser will enter into the contract with the entity itself, and the entity will function under the works contract as a single party. The legal relationship of the purchaser will be with that entity, and not with the individual members of the entity. In the event of a failure by the entity to perform its contractual obligations, the purchaser may be restricted by the law pursuant to which the entity was established to pursuing its claim against the entity, rather than against the individual members. This point may be of particular concern to the purchaser, since some legal systems permit these entities to be organized with minimal capitalization, and limit the responsibility of their members to the amount of their respective capital contributions. In such a case it may be important for the purchaser to obtain performance guarantees in order to provide sufficient financial security for the performance by the contractor (see chapter XVII, "Security for performance"). In some legal systems, however, the members of entities of certain types may have some liability for a failure of the entity to perform.
- 6. If, as is normally the case, a group acting as a contractor is organized without independent legal personality, it would be advantageous to the purchaser if each of the members became a party to the contract, since responsibility for performance would be spread among several firms instead of being concentrated in only one firm. The purchaser would be best protected if all of the members of the group were to assume joint and several liability for the performance of the obligations incumbent upon the contractor, instead of each member assuming liability only for obligations to be performed by him. With all members being jointly and severally liable, the purchaser would be able to claim performance against any one or combination of the members without having to attribute the failure to a particular member, and each member would be personally liable for any failure to perform. In the event of such a failure the purchaser would be able to reach the combined assets of all the members.
- 7. It would be advisable for the purchaser not to have to deal with each member of a group which has no independent legal personality in connection with matters arising during the course of the performance of the contract. The members may designate one of the members to serve as spokesperson for the group and to act on behalf of all members in their dealings with the purchaser.

B. Joint venture between contractor and purchaser

- 8. An alternative to the conventional contract, in which each party has certain rights and assumes certain obligations, including assumption of the costs and risks associated with the performance of his own obligations, is the joint venture between the contractor and the purchaser. Joint ventures of this nature involve, to varying degrees, the combining of resources of the contractor and the purchaser in order to accomplish the objectives of the venture, and the sharing by the parties of the profits and losses of the venture as well as the risks associated with it. The objectives of the joint venture usually include not only the construction of the works, but also the subsequent operation of the works and the production and marketing of the output of the works.
- 9. A joint venture between the contractor and the purchaser could in some cases offer certain advantages to the purchaser as compared with a conventional contract. The joint venture might facilitate the obtaining of technology, managerial skills and access to world markets (e.g. markets to which the contractor has access) by the purchaser. The sharing of the costs and risks associated with the venture means that those factors are less burdensome to the purchaser than under a conventional contract. A joint venture involving the production and marketing of the output of the works could give the contractor a greater interest in the proper functioning of the works. That factor sometimes prompts international lending institutions to require the contractor to enter into a joint venture with the purchaser. The cost to the purchaser of those advantages, however, is the loss of some degree of managerial control and the necessity of sharing the profits of the venture with the contractor.
- 10. To the contractor, a joint venture with the purchaser may present the advantages of, for example, facilitating access to markets in the country or region of the purchaser, or to markets which favour purchasing from the country of the purchaser, and the opportunity to participate in the profits of the venture. Furthermore, some developing countries offer financial incentives to encourage foreign enterprises to form joint ventures with local enterprises. The costs to the contractor of these advantages arise principally from his sharing of the risks associated with the venture.
- 11. When a joint venture is formed between the contractor and the purchaser, the joint venture entity usually enters into a contract for the construction of the works which is separate from the agreement establishing the joint venture. If the joint venture entity has independent legal personality, it might enter into a works contract with the contractor who is a member of the joint venture, or it might enter into a works contract with a second contractor who is not a member of the joint venture. If the joint venture entity does not have independent legal personality, it may enter into a works contract with a contractor who is not a member of the joint venture. In some cases the purchaser may enter into a works contract with the

contractor, and enter into a joint venture with the contractor only with respect to the production and marketing of the output of the works. In any of these cases the discussion in part two of this Guide is relevant to the issues arising in the context of the works contracts.

[A/CN.9/WG.V/WP.17/Add.3]

Chapter IV. General remarks on drafting

Summary

A purchaser may find it advantageous to prepare the first draft of a works contract, as this will enable him to clarify what he wishes to achieve through the contract. The contract terms as reduced to writing should be unambiguous, and the relationship between the various documents comprising the contract should be clearly established. After the parties have reached agreement on the main technical and commercial issues, it would be useful to review the documents in the light of the law applicable to the contract (paragraphs 1 to 3). The parties should also take account of mandatory legal rules of a public nature relevant to the contract (paragraph 4). If the parties use precedents (e.g. standard forms of contract) to facilitate their drafting, they should carefully examine the provisions of those precedents to see if the precedents accurately reflect their own agreement (paragraph 5).

It would be preferable to conclude the contract in a single language version understood by the senior personnel of each party who will be implementing the contract. If the contract is concluded in more than one language version, the contract should provide which version is to prevail in the event of a conflict between them (paragraph 6).

The parties to the contract should be identified in a controlling document which comes first in logical sequence among the contract documents. This document should set forth the names of the parties, their addresses, the subject-matter of the contract, and also record the date on which and the place at which the contract was signed. Evidence should be obtained of the capacity of a party to enter into the contract, and the authority of a representative or agent to represent or contract on behalf of a party (paragraphs 7 and 8).

The parties should clearly identify which documents constitute the contract, and provide rules for resolving inconsistencies between contract documents (paragraphs 9 and 10). The parties should also determine the extent to which oral exchanges, correspondence and draft documents which emanated during the negotiations may be used to interpret the contract documents (paragraph 11). The parties may wish to provide that headings and marginal notes used in the contract to facilitate its reading

are not to be regarded as affecting the rights and obligations of the parties. If considered desirable, recitals may be included in the controlling contract document to describe the object of the contract, or the context in which it was concluded (paragraphs 12 and 13).

Notifications by one party to the other are frequently required under works contracts for certain purposes. It would be desirable to provide that all such notifications are to be given in writing. What may qualify as writing should be defined. The contract should specify the time when a notification is to be effective: either upon despatch by the party giving the notification, or upon receipt by the party to whom the notification is given (paragraphs 15 to 17). The contract should also determine in which cases a notification may be given by the purchaser to a representative of the contractor in the country where the works are being constructed, in which cases it must be given to the head office of the contractor, and the consequences of a failure to notify (paragraphs 18 and 19).

Works contracts often define key words used in the contract to ensure that the words defined are understood in the same sense wherever they are used in the contract. What words need to be defined, and the meaning to be assigned to a particular word, will depend on the language used in a particular contract and the intention of the parties. Parties may find the definitions set forth in this chapter useful for the purpose of formulating definitions relevant to their contract (paragraphs 20 to 22).

A. General remarks

- 1. A works contract is usually the end product of extensive negotiations between the parties, including oral exchanges, correspondence and the consideration of draft documents prepared by each party. A first draft of the contract is often prepared by one of the parties, usually the purchaser. This draft may be provided to prospective tenderers, or to persons with whom the purchaser proposes to negotiate a contract, as the basis on which a contract is to be concluded. The purchaser may find it advantageous to prepare a first draft, as the process of preparing the draft will generally clarify what he wishes to achieve through the contract and enable him to determine his negotiating position. During negotiations between the prospective parties to the contract, this first draft will be refined and elaborated resulting in a preliminary set of contract documents which, after final review, will become the contract between the parties.
- 2. The contract may need to be administered by persons who have not participated in the negotiations leading to the conclusion of the contract, and at a time long after the negotiations have taken place. Accordingly, the parties should take particular care to ensure that the contract terms as reduced to writing are unambiguous and will not

give rise to disputes, and that the relationship between the various documents comprising the contract is clearly established. To this end, each party may find it useful to designate one person, either on his staff or specially retained for this purpose, to be primarily responsible for the drafting. Such a person should be a skilled draftsman familiar with international works contracts and have a mastery of the language in which the contract is to be drafted. To the extent possible, this person should be present during important negotiations. Each party may find it useful to have the final contract documents scrutinized by a team having expertise in the areas of knowledge reflected in the documents in order to ensure accuracy and consistency of style and content.

- 3. After the parties have reached agreement on the main technical and commercial issues, it would be useful if the parties agreed upon the law applicable to the contract (see chapter XXVIII, "Choice of law") and reviewed the documents reflecting their agreement in the light of the applicable law. This law will contain rules on the interpretation of contracts and may contain presumptions as to the meaning of certain words or phrases. It may also contain mandatory rules regulating, in particular, the form or validity of contracts, which the parties should take into account in drafting their contract. In particular, it is desirable that the legal terminology of the contract should, wherever possible, be in conformity with the terminology of the applicable law.
- 4. In addition to the law applicable to the contract, the different types of relevant mandatory legal rules of an administrative, fiscal or other public nature in the country of each party should be taken into account before the contract is finalized. Certain rules may concern the technical aspects of the works or the manner of its construction (e.g. rules relating to environmental protection, or safety standards to be observed during construction). The terms of the contract should not conflict with such rules. Other rules may concern export, import and foreign exchange restrictions, and should be taken into account when formulating the rights and obligations of the parties on issues such as the export and import of equipment and materials, the supply of services, the transfer of technology and payment of the price. Yet other rules relating to taxation may be a factor influencing the contracting approach to be chosen (see chapter II, "Choice of contracting approach") and may determine whether provisions should be included in the contract dealing with liability for tax. Furthermore, the parties should take into consideration treaties on the avoidance of double taxation which may have been concluded between their countries. The parties may find it desirable to consult expert advisers on the various aspects of liability for taxation when drafting their contract.
- 5. If the parties find it useful to examine standard forms of contract, general conditions, standard clauses, or previously concluded contracts as precedents to facilitate the preparation of contract documents, the provisions of such precedents should be adopted only after critical examination. A precedent may as a whole reflect a

balance of interests which is not desired, or the various terms of the precedent may not accurately reflect the terms agreed to by the parties to that contract. Or, while a provision regarded as a precedent may be acceptable in isolation, it may not be consistent with other provisions agreed upon by the parties. The parties may find it useful to refer to the illustrative provisions set forth in the various chapters of this guide as aids to drafting (see also "Introduction").

B. Language of contract

6. The contract may be concluded in only one language version, or in more than one language version. Concluding the contract in only one language version will reduce conflicts of interpretation in regard to contractual provisions. The language chosen should be one understood by the senior personnel of each party who will be implementing the contract, and may even be a language other than that of either the purchaser or contractor. The language should also contain the technical terms necessary to reflect the agreement of the parties on technical issues. If the language of the country of the applicable law is one understood by both parties, dispute settlement may be facilitated by a choice of that language. Where the parties cannot agree to confine the contract to a single language version, the parties should specify in the contract which language version is to prevail in the event of a conflict between the various versions. For example, if the contract is concluded in two languages, but the negotiations were conducted in one of the two languages, they may wish to provide that the version in the language of the negotiations is to prevail. A provision that one of the language versions is to prevail would induce both parties to clarify as far as possible the prevailing language version. The parties may wish one language version to prevail in respect of certain contract documents (e.g. technical documents) and another language version in respect of the remainder of the documents. Alternatively, the parties may provide that all language versions are to have equal status. In such a case, however, the parties should attempt to provide guidelines for the settlement of disputes if conflicts are later shown to exist between the language versions (e.g. that the rights and obligations of the parties should be determined in accordance with their true intention, regard being had to the contract in both its language versions).

C. Parties to and execution of contract

7. The parties to the contract are normally identified in a document which comes first in logical sequence among the contract documents, and which usually performs a controlling role over the other documents. This document should set forth in a legally accurate form the names of the parties, indicate their addresses, record the fact that the parties have entered into a contract, briefly describe the subject-matter of the contract, and be signed by the parties. It should also set forth the date on which, and the place where, the contract was signed. Further reference

in the contract to the parties would be facilitated if the phrases "hereinafter referred to as the purchaser" and "hereinafter referred to as the contractor" are added after the names of the purchaser and contractor respectively. The construction is sometimes undertaken by two or more enterprises acting in collaboration (sometimes referred to as a consortium: see chapter I, "Pre-investment studies". In such cases, the names and addresses of each enterprise should be set forth. A party may have several addresses (the address of its head office, the address of a branch through which the contract was negotiated) and it may be preferable to include an address to which notifications directed to a party may appropriately be sent (e.g. the head office, see paragraph 18, below).

8. Parties to works contracts are usually corporate bodies. In such cases the source of their corporate status (e.g. incorporation under the laws of a particular country) should be set forth. Corporate bodies often have limitations on their capacity to enter into contracts. Each party should therefore require from the other documentary proof of capacity to enter into the works contract. If a party to the contract is a corporate body and the contract is signed by an official of the corporate body (e.g. the managing director), evidence that the official can bind the corporation should be annexed. If the contract is entered into by an agent on behalf of a principal, the name, address, and status of the agent and principal should be identified, and evidence of authority from the principal enabling the agent to enter into the contract on his behalf may be annexed (unless sufficient evidence of authority has already been provided with the tender documents, see chapter III, "Procedure for concluding contract").

D. Contract documents and interpretation

- 9. It is desirable to avoid uncertainty as to what constitutes the works contract. To achieve this, the parties should in the first place reduce to writing the terms agreed upon between them. It may in addition be desirable for the contract to provide that any modification to such terms should also be effected in writing. A works contract usually consists of several documents (e.g. documents setting out contract terms, drawings and specifications). These documents may be attached as annexes to the controlling document (see paragraph 7, above), with the controlling document making clear through a definition of "the contract" (see paragraph 22, below) or otherwise, that the controlling document and the annexes constitute the contract. Where for reasons of convenience a single contract document is physically separated into parts, the parts should be identified as together constituting a single document.
- 10. Despite the best efforts of the parties to achieve consistency between the documents, it may be discovered during the performance of a contract that the provisions in two documents, or even within the same document, appear to be inconsistent. The parties may wish to provide that in the first instance the entirety of the

contract documents should be examined to discover the intention of the parties on the relevant issue, and an attempt made to resolve the inconsistency in the light of that intention. The parties may also wish to provide for instances where this approach fails to resolve the inconsistency. They may wish to provide in the contract that in respect of certain types of contract documents one is to prevail over the other in the event of inconsistency (e.g. that the controlling contract document prevails over all others, that a contract document is to prevail over an appendix thereto, or that a contract document is to prevail over general conditions incorporated therein by reference). The imposition of such rules as to priority often acts as an inducement to the parties to scrutinize with care the documents subject to the rules. In respect of other types of contract documents, however, it may be difficult to lay down rules in the contract that certain documents are to prevail over others. Several factors may have to be taken into account in determining which document is to prevail, such as which document embodied the later negotiations between the parties, the nature of the conflict between the documents, and which document was principally focused on the issue in question. The parties may wish to lay down criteria for determining which document is to prevail (e.g. that the document which enables the contract to be implemented more efficiently should prevail).

- 11. With regard to the relationship between the contract documents, and the oral exchanges, correspondence and draft documents which emanated during the negotiations, one of two approaches may be adopted. The parties may wish expressly to provide that such communications and documents cannot be used to interpret the contract. An alternative approach is to provide that such communications and documents may be used to interpret the contract to the extent permitted by the applicable law. The former approach may reduce uncertainty as to the parties' rights and obligations, while the latter approach may lead to a fairer result if a dispute arises as to the meaning of contract language. In any event the contract should provide that such communications and documents shall not modify the agreement of the parties as set forth in the contract.
- 12. The various parts of a contract, the parts of a contract document, or a group of contract provisions are often introduced by headings. Short marginal notes are also sometimes placed by the side of contract provisions describing the substance of those provisions. Since headings and side notes are generally inserted only to facilitate the reading of the contract, the parties may wish to provide that they are not to be regarded as setting forth or affecting the contractual rights or obligations of the parties.
- 13. The parties may wish to consider whether the controlling contract document should set forth introductory recitals. One purpose of the recitals may be to set forth representations which induced the conclusion of the contract. Other purposes may be to set forth the object of the contract, or to describe the context in which it was

concluded. The extent to which the recitals are used in the interpretation of a contract may vary under different legal systems. If the contents of the introductory recitals are intended to be significant in the interpretation or implementation of the contract, it may be preferable to include the contents of the recitals in contract provisions.

14. When the separate contracts approach is adopted, the time-schedules for the performances of two or more contractors are often interdependent. Thus delay by one contractor may result in a second contractor being unable to commence his part of the construction on the appointed date. The second contractor may be entitled to recover compensation for loss arising out of the delay from the purchaser, and the purchaser will wish in turn to be indemnified by the contractor in delay. In order to bring to the knowledge of a contractor the possible consequences of his delay, it may be advisable for each contract to mention the relationship of its time-schedule to related time-schedules of other contracts. If a timeschedule integrating the performances of the various separate contracts has been prepared, it may be sufficient to annex this integrated time-schedule to the contract.

E. Notifications

- 15. Works contracts frequently require a party in defined cases to notify the other party of certain events or situations. Such notifications may be required for one or more of the following purposes: to enable co-operation in the performance of the contract (e.g. a notification by the contractor that performance tests will be held on a specified date), to enable a party to take action (e.g. a notification by the purchaser of defects discovered by him in the works, in order to enable the contractor to remedy the defects) or as the prerequisite to the exercise of a right (e.g. notification by a party to the other of the existence of an exempting impediment, such notification being under the contract a prerequisite to his ability to rely on the exempting impediment). The parties should address and resolve certain issues which arise in connection with such notifications.
- 16. In the interests of certainty, it would be desirable to require that all notifications referred to in the contract be given in writing. The parties may also wish to define "writing" (see paragraph 22, below) and to specify what means of conveying notifications (surface mail, airmail, telex, telegraph, electronic data transmissions) are acceptable. They may also wish to specify the language in which the notifications are to be given. With regard to the time when a notification is to be effective, two approaches are available to the parties: to provide that a notification is effective upon despatch of the notification by a party, or that it is effective only upon receipt of the notification by the other party (see paragraph 22, below). Under the former approach the risk of a failure to transmit or an error by the transmitting agency in transmission of the notification rests on the party to whom the notification is sent, while under the latter approach it rests on the party despatching the notification. The parties may find it

advisable to select means of conveying notifications under which (depending on the approach adopted) proof of despatch or receipt, and the time of despatch or receipt, may be readily obtained.

- 17. It may be convenient for the contract to provide that, unless otherwise specified, one or the other approach with respect to when a notification becomes effective is to apply to notifications referred to in the contract. Exceptions to the general approach adopted may be appropriate for certain notifications. Thus, when a general rule is provided that a notification is to be effective upon despatch, it may nevertheless be provided that notifications to be given by a party who has failed to perform should be effective upon receipt, since it is fair that such a party should bear the risk of a failure or error in communication. When a general rule is provided that a notification is to be effective upon receipt, it may nevertheless be provided, for instance, that if a purchaser is obligated to notify the contractor of the existence of defects in the works and the purchaser loses his remedies in respect of the defects if he fails to notify, such a notification is effective upon despatch.
- 18. Since the contractor will sometimes have a representative in the country where the works is being constructed, the contract may provide that notifications by the purchaser to the contractor may be given to such representative, and also that the representative is authorized to give notifications on behalf of the contractor. The uncertainties of foreign transmission of notifications may thereby be reduced. All notifications of a routine character required in the course of the performance of the contract may be given to the representative. If the representative is present on site, a written record of the notifications (e.g. a correspondence log) may be jointly maintained on site by the representatives of the purchaser and the contractor. The contract may also provide that notifications which are not of a routine character (e.g. notifications of suspension of construction, or termination of the contract) are to be given only to the head office of the contractor.
- 19. The parties should also determine the legal consequences of a failure to notify. Where there is a contractual obligation to notify, failure to notify will normally result in a liability to pay damages. In exceptional cases, the parties may also wish to provide that a party who fails to notify loses a right which he possesses (e.g. to rely on an exempting impediment: see chapter XXI, "Exemption clauses"). In some cases a party to whom a notification is given may be required to give a response to that notice. The parties may wish to specify the consequences of a failure to respond. For example, they may provide that a party to whom drawings or specifications are sent for approval and who does not respond within a specified period of time is deemed to approve them.

F. Definitions

20. Works contracts often contain definitions of key words used in the contract. A definition ensures that the

word defined is understood in the same sense whenever it is used in the contract, and dispenses with the need to clarify the intended meaning of the word on each occasion that it is used. A definition is advisable if a word which needs to be used in the contract is ambiguous. Definitions contained in a contract are frequently made subject to the qualification that the words defined bear the meanings assigned to them, "unless the context otherwise requires". Such a qualification deals with the possibility that a word which has been defined has inadvertently been used in a context in which it cannot bear the meaning assigned to it in the definition. The preferable course is for the parties to scrutinize carefully the contract to ensure that the words defined bear the meanings assigned to them wherever they occur, thereby eliminating the need for such a qualification.

- 21. Since a definition is usually intended to apply throughout a contract, a list of definitions may be included in the controlling contract document. Where, however, a word which needs definition is used only in a particular provision or a particular section of the contract, it may be more convenient to include a definition in the provision or section in question.
- 22. What words need to be defined, and the meaning to be assigned to a particular word, will depend on the language used in a particular contract and the intention of the parties. The following words are often used in works contracts, and the parties may find the definitions set forth below to be useful guides for the purpose of formulating definitions relevant to their own contract:

The contract

"The contract" consists of the following documents, and has that meaning in all the said documents:

(a) This document

(b)

(c)

etc.

Site

"Site" means the area of land as described in [identify contract document] on which the works is to be constructed.

Contractor's machinery and tools

"Contractor's machinery and tools" means any appliances, equipment, sheds, stores, or other things brought on the site by or on behalf of the contractor for the performance of the contract, but not for incorporation in the works.

Writing

"Writing" includes statements contained in a telex, telegram or other means of telecommunication which provides a record of such statements.

Despatch

"Despatch" by a party of a notification occurs when it is properly addressed and conveyed for transmission by a mode authorized under the contract to the appropriate authority for such transmission.

Receipt

"Receipt" by a party of a notification occurs when it is handed over to that party, or when it is delivered at an address of that party to which, under the contract, the notification may be delivered.

Subcontractor

"Subcontractor" means any person engaged by the contractor to perform any of his obligations under the works contract in regard to the construction of the works.

Legal proceedings

"Legal proceedings" means judicial proceedings or arbitral proceedings.

[A/CN.9/WG.V/WP.17/Add.4]

Chapter VIII: Supply of equipment and materials

Summary:

The supply of equipment and materials to be incorporated in the works is connected with issues such as the passing of risk of loss or damage to the equipment and materials from the contractor to the purchaser, the transfer of ownership of the equipment and materials, insurance of the equipment and materials and the supply of spare parts for the equipment after construction. Those connected issues are dealt with in other chapters (paragraphs 1 and 2). Since the equipment and materials are usually to be incorporated in the works by the contractor, the supply, unlike the delivery of equipment and materials under a sales contract, is only a partial performance of the contractor's obligations (paragraph 3).

It is desirable for the contract to describe the equipment and materials to be supplied. The nature of the description will depend upon the contracting approach chosen by the purchaser and the extent of the contractor's obligations (paragraphs 5 and 6).

The contract should specify the time when and the place to which equipment and materials are to be supplied. The contract may, depending on the nature of the time-schedule for the contract, express the time for supply as a specified date, or as a period of time. A specification of the time of supply is important in cases where the performances of several contractors have to be co-ordinated. In such cases the time of supply may be specified in the time-schedule as obligatory (paragraphs 7 and 8). Specification of the place to which equipment and

materials are to be supplied may be important to enable the purchaser to determine where he is to take over the equipment and materials, or where risk of loss of or damage to the equipment and materials may pass to him (paragraph 9).

The contract should specify which party is obligated to arrange for the transport of equipment and materials to the site, and bear the costs connected with that transport. The contract should deal with such issues as the packing of the equipment and materials, permits required for the transport, marking of the equipment and materials, and despatch of the transport documents (paragraphs 10 to 14).

The contract should determine which party is to be responsible for customs clearance of equipment and materials, and for the payment of customs duties. There may be legal rules in the country where the works are to be constructed which restrict the import of equipment and materials, and rules in the contractor's country which restrict the export of equipment and materials. The contract should allocate responsibility for obtaining necessary import or export licences (paragraphs 15 to 17).

Equipment and materials supplied by the contractor may need to be taken over by the purchaser prior to storing them, or prior to their incorporation in the works by the purchaser or by a contractor other than the one supplying the equipment and materials. Disputes may arise as to whether loss or damage to, or defects in, the equipment and materials arise before or after the take-over. Such disputes may be reduced if the purchaser is obligated to check the apparent condition of the equipment and materials at the time of take-over, and notify the contractor of any loss, damage or defects which he discovers. The contractor should be obligated to cure the defects (paragraphs 18 to 20).

If equipment and materials are to be stored on site, the contract should determine which party is to assume responsibility for storage and is to provide storage facilities. If the purchaser stores the equipment and materials, the contract should provide that the contractor is to check the equipment and materials at the time that they are handed back to him (paragraphs 21 to 26).

If the purchaser is to supply certain equipment and materials for use by the contractor, the contract should specify the quantity and quality of the equipment and materials to be so supplied. The parties may wish to specify the legal consequences of delay in supply by the purchaser and of defects in the equipment and materials supplied (paragraphs 27 to 30).

A. General remarks

1. This chapter deals with the supply of equipment and materials which are to be incorporated in the works. The contractor's machinery and tools which are to be used for

effecting the construction without becoming part of the works are discussed in chapter IX, "Construction on site".

- 2. Certain aspects of the supply of equipment and materials to be incorporated in the works are discussed in other chapters. The time of the passing of risk of loss of or damage to equipment and materials from the contractor to the purchaser, and the consequences of the passing of risk, are discussed in chapter XIV, "Passing of risk". The time of the transfer of ownership of equipment and materials from the contractor to the purchaser is discussed in chapter XV, "Transfer of ownership of property". Insurance of equipment and materials is discussed in chapter XVI, "Insurance". Spare parts for equipment incorporated in the works to be supplied by the contractor after completion of construction are discussed in chapter XXVI, "Supplies of spare parts and services after construction".
- 3. Since equipment and materials supplied by the contractor are usually also to be incorporated in the works by him, the mere supply of the equipment and materials is only a partial performance of the contractor's obligations. Supply under a works contract is therefore to be distinguished from the delivery of equipment and materials under a sales contract. In some cases (in particular if only a single contractor is engaged to construct the whole works) the equipment and materials may remain in the hands of the contractor after arrival at the site until their incorporation in the works. In other cases they may be taken over by the purchaser for storage purposes, and later handed back to the contractor for incorporation in the works.
- 4. The time of supply to the site of equipment and materials by the contractor may have certain legal consequences. The time of supply may be relevant for checking the progress of construction under a time-schedule (see chapter IX, "Construction on site"). If the purchaser fails to take over equipment and materials at the place of supply, risk may pass to the purchaser in respect of the equipment and materials (see chapter XIV, "Passing of risk").

B. Supply of equipment and materials by contractor

- 1. Description of equipment and materials to be supplied
- 5. As a general matter, it is desirable for the contract to describe the equipment and materials which are to be supplied by the contractor. However, the nature of the description will depend upon the contracting approach chosen by the purchaser and upon the extent of the contractor's obligations. In some cases, for example, the contractor may be one of several engaged to construct the works, and his principal obligation may be to supply a certain type of equipment. Since under that contracting approach the purchaser assumes the risks associated with co-ordinating the performances to be effected by the

- contractors (see chapter II, "Choice of contracting approach"), he must ensure that all equipment and materials required for the construction of the entire works are included and clearly described in the various contracts.
- 6. When a single contractor is obligated to construct the entire works (e.g. under a turnkey contract) or a particular portion of the works (e.g. a power station), the contractor is obligated to supply all equipment and materials needed to effect the required construction, even if all items of the equipment and materials are not specifically described in the contract. Nevertheless, it is often desirable for the contract to describe the important items of equipment and materials to be supplied, since such a description may provide an assurance of the quality of construction (see chapter V, "Description of works" and chapter XII, "Inspection").

2. Time and place of supply

- 7. The contract should specify the time when and the place to which the equipment and materials are to be supplied. The contract may express the time for supply as a specified date, or a period of time. A specified date is appropriate when a rigid time-schedule has been established for the construction, with the contractor possibly not even being permitted to supply earlier than the specified date (e.g. because storage facilities or funds to pay for the supply would not be available earlier). In certain circumstances, it may not be possible to specify a date for supply, for example, when the time of supply has to be linked to prior performance by another contractor, and the time of that performance is uncertain. It may then be appropriate to provide for supply during a period of time commencing to run from the completion of that performance by the other contractor. If a period of time is provided, the contract may stipulate that the contractor is entitled to supply the equipment and materials at any time within the period, or may stipulate that the purchaser is entitled to require the equipment and materials to be supplied at a particular time within the period (e.g. in the light of progress in construction by other contractors).
- 8. When equipment and materials are to be incorporated in the works by other contractors under the supervision of the contractor supplying the equipment and materials, a specification of the time when the equipment and materials must be supplied is important in order to ensure that the other contractors know when they can commence their performances. In those cases it is usually desirable to specify in the time-schedule for construction that the time of supply is obligatory. Even in cases where the equipment and materials are to be used only by the contractor supplying them, specification of the time and place of supply may be important to enable the purchaser to determine whether a time-schedule for construction is being observed by the contractor (see chapter IX, "Construction on site"). A failure of the contractor to supply equipment and materials on time at the place of supply will result in the contractor being in delay in cases where the time of supply under the time-

schedule is obligatory. Furthermore, the payment of a portion of the price may be linked to the time of supply of equipment and materials.

9. If equipment and materials are to remain in the hands of the contractor to be incorporated by him in the works, the specified place of supply should normally be the site, and the contract should provide that the supply is to take place upon the arrival of the equipment and materials at the site. If the equipment and materials are to be taken over by the purchaser (see paragraph 18, below) the contractor should be obligated to supply the equipment and materials by placing them at the disposal of the purchaser on the site or at another specified place. In cases where the purchaser is to arrange for the transport of the equipment and materials to the site, the contractor may be obligated to hand over the equipment and materials at a specified place of supply to the first carrier engaged by the purchaser for the transport. The costs of supplying the equipment and materials at the specified place of supply should be borne by the contractor, unless the cost reimbursable method of pricing is used. Furthermore, the place of supply may be important in some cases for the passing of risk from the contractor to the purchaser. For example, the contract may provide that equipment and materials are to be supplied to a specified place, and that the risk of loss of or damage to the equipment and materials passes to the purchaser if he fails to take over the equipment and materials within a specified period of time after they are placed at his disposal.

3. Transport of equipment and materials

- 10. The contract should specify which party is obligated to arrange for the transport of equipment and materials to the site, and to bear the costs connected with that transport. In a turnkey lump-sum contract the contractor is frequently responsible for arranging transport, and the costs connected therewith are usually considered to be included in the lump-sum price. Under other contracting approaches either the contractor or the purchaser might be obligated to arrange the transport.
- 11. The contract might obligate the contractor to arrange and pay for transport to the place where the equipment and materials are to be supplied. The contract may refer to an appropriate trade term (e.g. C.I.F.) as interpreted under the International Rules for the Interpretation of Trade Terms (INCOTERMS)¹. If the purchaser is to arrange for the transport, the contractor should be obligated under the contract to notify the purchaser of the date when the transport is needed sufficiently in advance of that date.
- 12. The contractor should in all cases be responsible for the packing and protection of the equipment and materials in a manner adequate for transport to the site by the means of transport envisaged. The packing of equipment

¹The International Rules for the Interpretation of Trade Terms (INCOTERMS) prepared by the International Chamber of Commerce (ICC) are contained in ICC publication No. 350, 1980.

may be governed by legal rules applicable to international transport or to transport in the countries through which the equipment is to be transported (e.g. in respect of the dimensions of a package and the method of packing certain items such as dangerous goods). Under the lump-sum method of pricing the costs incurred in connection with the packing of equipment and materials are normally considered to be included in the agreed price.

- 13. The transport of the equipment may require road, rail or other transport permits, and the contract should specify which party is to be responsible for obtaining them. The party not responsible for obtaining them should be obligated to render any assistance necessary to obtain them (e.g. by providing information about the dimensions of the equipment, the kind of packaging used, or the formalities to be satisfied for obtaining the permits under applicable regulations).
- 14. If equipment and materials are to be taken over by the purchaser at the place of destination, it would be desirable for the contractor to be obligated to mark the packages containing the equipment and materials in a suitable manner so that they can be identified by the purchaser. In addition, the contractor should be obligated to mark the equipment and materials in accordance with the rules applicable to the mode of transport envisaged (e.g. to use the appropriate marking to indicate that the equipment is fragile or that the materials are dangerous). The contractor should be obligated to send the purchaser the relevant documents (such as invoices or transport documents); some of these documents may be required by the purchaser to receive the shipment (e.g. a bill of lading) or the receipt of the documents by the purchaser may be a precondition to payment of the price for the equipment and materials (see chapter VII, "Price"). Documents required by the purchaser to receive the shipment should be sent to the purchaser a reasonable time before the equipment and materials arrive at the place of destination.

4. Customs duties and restrictions applicable to supply

(a) Customs duties

- 15. The contract should specify which party is to arrange customs clearance of the equipment and materials and is to pay the customs duties. Customs duties are normally imposed on imported equipment and materials. However, in exceptional cases customs duties may be imposed on exported equipment and materials, or on equipment and materials during transit. It may be advisable to provide that customs clearance of equipment and materials for export, and the payment of export customs duties, are to be the responsibility of the contractor, and that customs clearance during transit, and the payment of transit customs duties, are to be the responsibility of the party making arrangements for the transport.
- 16. The contract should provide which party is responsible for customs clearance of equipment and materials for import, and the payment of import customs duties. If

equipment and materials are to be taken over by the purchaser (see paragraph 18, below), he may be responsible for the import customs clearance. If equipment and materials are to remain in the hands of the contractor after import, import customs clearance may be the responsibility either of the contractor or the purchaser, depending on which party would find it easier to satisfy the customs regulations applicable to the clearance. The party not responsible for the clearance should be obligated to assist in the clearance procedure, in particular by providing documents which may be needed therefor (e.g. the contractor by providing invoices and certificates of origin, and the purchaser by providing import licences or other required permits issued in the country of the purchaser). With regard to the payment of import customs duties, it may be advisable to provide that it is to be the responsibility of the purchaser. If such payment is to be the responsibility of the contractor, a change in the rates of import customs duties from those existing at the time of the conclusion of the contract may require a revision of the price (see chapter VII, "Price").

(b) Restrictions applicable to supply

17. There may be legal rules in the country where the works is to be constructed which restrict the import of equipment and materials, or rules in the contractor's country or another country from which equipment and materials are to be exported, which restrict the export of equipment and materials. The parties should take such rules into account when negotiating the contract. If import licences are required for the import of equipment and materials into the country where the works is to be constructed, the purchaser should be obligated to obtain the required licences. The contractor should be obligated to obtain any required export licences. The contract may provide that its entry into force will depend upon the granting of import and export licences (see chapter III, "Procedure for concluding contract"). If the licences needed for the import and export of the equipment and materials are not all obtainable within a short period of time after the conclusion of the contract, it may be provided that the contract enters into force even prior to the grant of the licences. The contract should however specify the consequences of a failure to obtain the licences (see chapter XXI, "Exemption clauses").

5. Take-over of equipment and materials by purchaser

- 18. In certain circumstances, equipment and materials supplied by the contractor may need to be taken over by the purchaser. Thus the purchaser may need to take over the equipment and materials prior to storing them (see section 6, "Storage on site", below). He may also need to take them over prior to their incorporation in the works when the incorporation is to be done either by himself or another contractor.
- 19. In some cases the contract may provide that the take-over of the equipment and materials by the purch-

aser is to result in the risk of loss of or damage to the equipment and materials passing to the purchaser from the time of take-over (see chapter XIV, "Passing of risk"). Where risk so passes, disputes may arise as to whether loss or damage occurred before or after takeover. Disputes may also arise as to whether defects were caused prior to take-over, e.g. by faulty manufacture or inadequate packing by the contractor, or after take-over, e.g. by improper storage by the purchaser. Such disputes may be reduced if the purchaser is obligated to check the apparent condition of the equipment and materials at the time of take-over, and to notify the contractor promptly of any loss, damage or defects which the purchaser discovers. However, the purchaser may not be familiar with the expected quality of the equipment and materials (e.g. because he does not have the technical knowledge to evaluate such quality). In addition, some defects may be discoverable only after the incorporation of the equipment and materials in the works and the completion of construction. Accordingly, even in cases where the purchaser fails to notify loss, damage or defects in respect of the equipment and materials, the contract may provide that the purchaser does not lose his rights in respect of the loss, damage or defects, provided however that he proves that the contractor is liable for the loss, damage or defects.

20. If the equipment and materials have defects for which the contractor is responsible, he should be obligated to cure the defects, though he should normally be free as to the manner in which the cure is to be effected. In addition, the purchaser may be entitled to prohibit the use of the defective equipment and materials by the contractor, and may be entitled to refuse to pay the price for the equipment and materials. To enable the contractor to repair the defects, the purchaser should be obligated to take over the defective equipment and materials, since in most cases the repair may be effected on the site (see chapter XVIII, "Delay, defects and other failures to perform"). The purchaser should, however, be entitled to compensation from the contractor for loss suffered by reason of the fact that the equipment and materials were defective (e.g. additional costs of storage until the cure of defects, or, where the purchaser himself was to use the equipment and materials, losses resulting from the purchaser's inability to use the equipment and materials until the cure of defects). The contract may provide that, if the defects in the equipment and materials are cured by the contractor, the time the cure is effected is deemed to be the time of supply. If the purchaser fails to take over equipment and materials, the contract may provide that the equipment and materials are deemed to be supplied at the time that they are placed at the disposal of the purchaser.

6. Storage on site

21. Equipment and materials must normally be available on the site at the time when the time-schedule calls for their incorporation in the works. They must, therefore, usually be supplied to the site and stored there prior to the time when they will be used. The contract should

determine the responsibilities of the parties in connection with such storage.

- 22. Who is to assume responsibility for storage should depend upon the contracting approach chosen by the purchaser. If only one contractor is engaged to construct the works, he should normally assume responsibility for storage. If more than one contractor is engaged to construct the works, the responsibility for storage of the equipment and materials supplied by each of the contractors may be assumed by him. If, however, the personnel of the contractor supplying the equipment and materials are not present on site at the time of supply or the contractor does not have suitable storage facilities, the purchaser may assume responsibility for storage. The contractor may be obligated to advise the purchaser on the appropriate manner in which the equipment and materials should be stored.
- 23. The responsibility for storage is distinct from the responsibility to provide storage facilities. If the contractor assumes responsibility for storage, but is unable to obtain suitable storage facilities, the purchaser may be obligated to provide storage facilities at a time to be determined in the time-schedule for construction (see chapter IX, "Construction on site"). When the contractor is obligated to provide storage facilities, the purchaser is usually obligated to provide the land on which the facilities are to be located.
- 24. The contract should clearly define the scope of the responsibility of a party for storage, and harmonize the provisions on such responsibility with the provisions on the passing of the risk of loss of or damage to equipment and materials supplied by the contractor. Thus, if the equipment and materials are, after having been supplied to the site, to remain in the hands of the contractor and be stored by him and the contractor bears the risk of loss of or damage to the equipment and materials, it may not be necessary to define his responsibility for storage. In such cases the contractor's responsibility for defects in the works, or the portion of the works in which the stored equipment and materials are to be incorporated, will be a sufficient incentive to exercise proper care in storage.
- 25. If the equipment and materials are to be stored by the purchaser, and the risk of loss of or damage to the equipment and materials is to be borne by him, the purchaser may be obligated to hand over the equipment and materials to the contractor in the same quantity and condition in which the purchaser took them over for storage. In cases where storage is to be effected by the purchaser but the risk is to be borne by the contractor, the purchaser may be obligated to take all reasonable precautions to prevent or minimize any loss or damage to the stored equipment and materials. In all cases where he stores the goods, the purchaser should be obligated to notify the contractor without delay of any loss of or damage to the stored equipment and materials.
- 26. The contract, or an agreement subsequently concluded between the parties, may determine the time and

manner in which equipment and materials are to be handed back by the purchaser from his stores to the contractor to be used for construction. The contractor may be obligated to check the equipment and materials at the time they are handed back to him by the purchaser, and to notify the purchaser of defects. Whether the purchaser is liable for the defects will depend on the nature of the purchaser's responsibility for storage. However, the contract may provide that, if the contractor does not notify the purchaser of defects for which the purchaser is liable and describe their nature within a specified period of time after he has discovered or ought to have discovered them, the contractor loses his right to hold the purchaser liable for those defects.

C. Supply of equipment and materials by purchaser

- 27. Under some works contracts the purchaser may assume the obligation to supply certain equipment and materials needed for the construction of the works by the contractor. This should be distinguished from the situation where the purchaser has decided to construct a portion of the works himself, for which construction the purchaser is to be solely responsible (see chapter II, "Choice of contracting approach"). The supply by the purchaser of equipment and materials needed for the construction of the works by the contractor may in particular be advisable where the equipment and materials can be obtained in the purchaser's country at lesser cost than abroad, or where it is important for the purchaser to conserve foreign exchange.
- 28. The quantity and quality of the equipment and materials to be supplied by the purchaser should be specified in the contract. It may be the responsibility of the contractor to specify the quantity and quality of equipment and materials appropriate for the construction to be effected by him. The time of supply by the purchaser to the site should be identified in the time-schedule (see chapter IX, "Construction on site") by reference to dates or periods of time in a manner similar to the identification of the time of supply by the contractor (see paragraph 7, above).
- 29. The supply to be effected by the purchaser would affect the performance of the construction obligations of the contractor. The parties may, therefore, wish to specify in the contract the legal consequences of delay by the purchaser in supplying the equipment and materials, or of supplying equipment and materials of a quality inferior to that specified in the contract. The contractor should not be considered to be in delay if the construction of the works or a portion thereof is not completed by him in time due to the purchaser's delay in supplying equipment and materials. In addition, the contractor should not be responsible for defects in the works if they were caused by defects in equipment and materials supplied by the purchaser (see chapter XVIII, "Delay, defects and other failures to perform"). Furthermore, the contractor

may be entitled to damages for loss caused to him by delay or defects (see chapter XX, "Damages" and chapter XXI, "Exemption clauses"). The contractor should, however, be obligated to inspect with reasonable care the equipment and materials promptly after their supply. The contract may also provide that, if the contractor does not notify the purchaser of defects which he has discovered or could have discovered through a reasonable inspection, within a specified period of time after the supply, the contractor loses his right to rely on those defects as an excuse for responsibility for defects in the works, or to recover damages for loss caused to him by those defects.

30. The parties may usually wish to agree that the contractor is not to pay for the supply of equipment and materials by the purchaser as a separate item, but that the value of the supply by the purchaser is to be accounted for in determining the price to be paid by the purchaser for construction of the works. Exceptionally, however, the parties may wish to agree that the contractor is to pay the purchaser for the supply of some or all of the equipment and materials as a separate item. The payment conditions would usually be similar to those used in an international sales contract.

[A/CN.9/WG.V/WP.17/Add.5]

Chapter XXVI. Supplies of spare parts and services after construction

Summary

Even after the works are ready to operate, the purchaser may need assistance which the contractor is able to supply. Spare parts will be needed to replace equipment which is worn out. The works will need to be maintained. If breakdowns occur, the works will need to be repaired. If the purchaser does not have all the skilled personnel necessary for the technical operation of the works, he may need assistance from the contractor to operate it. The planning of the parties in regard to the supply of spare parts and services would be facilitated if the parties could provide for the supply in the works contract (paragraphs 1 to 4).

A person offering to construct the works may be required to indicate the spare parts which will be needed over a specified period of operation, and the prices at which and the period of time during which he can supply them. In regard to spare parts obtainable only from the contractor, the purchaser may find it advisable to obligate the contractor to supply a large stock of such spare parts by the time the construction is completed (paragraphs 6 to 9). If spare parts are manufactured not by the contractor but for the contractor by suppliers, the purchaser may enter into contracts with those suppliers (paragraph 10).

If the estimate of spare parts needed over a given period furnished by the contractor is discovered to be incorrect, the contractor should be obligated to supply such additional spare parts as are needed. The parties should address the modalities of ordering and delivery of spare parts. The contract should determine the quality of the spare parts to be supplied, and provide for a quality guarantee in respect of them (paragraphs 12 to 14).

The contractor should be obligated to inform the purchaser if he re-designs or improves spare parts which he has undertaken to supply. He should also be obligated to supply instruction manuals, tools and equipment necessary for the installation of spare parts (paragraphs 15 and 16).

A person offering to construct the works may be required to indicate whether he is prepared to supply the maintenance services required by the works and the duration for which he is prepared to supply those services. The contractor may be required to submit a maintenance programme designed to ensure the proper operation of the works, and the maintenance obligations of the contractor may be defined on the basis of that programme (paragraphs 17 and 18).

The standards to be observed by the contractor when performing maintenance work may be specified. The contractor should be obligated to furnish a report on each maintenance operation (paragraphs 19 and 20). The contract should specify how the price is to be determined (e.g. a lump-sum price, unit rates, or a cost-reimbursable basis). The payment conditions applicable (e.g. relating to the currency, place and time of payment) should also be specified (paragraphs 21 and 22).

The contract should define the extent of the contractor's repair obligations (paragraphs 23 and 24). The procedure for notifying the contractor of the need for repairs should be settled. The contractor may be required to submit an estimate of the cost of repair and the time-schedule for effecting them, and thereafter the terms of repair may be agreed by the parties. The payment conditions applicable should be specified (paragraphs 25 to 27).

The standards to be observed by the contractor when effecting repairs may be specified. The contractor should be obligated to furnish a report on each repair operation which he performs. The contractor should be required to give a guarantee under which he assumes responsibility for defects in repairs (paragraphs 28 and 29).

If the contract imposes obligations on the contractor with regard to the technical operation of the works, the scope of these obligations should be carefully defined. In order to define the obligations of the contractor with regard to the operation of the works, an organizational chart may be prepared showing the functions allotted to the personnel of the contractor. The division of control between the purchaser and contractor during the operation of the works should be clearly described. The

contract should also provide a procedure for resolving complaints by one party against the other (paragraphs 31 and 32).

The contract should provide how the price is to be determined (e.g. a lump-sum price, or fixed amounts combined with the cost reimbursable method). The payment conditions applicable should also be specified (paragraph 33).

The purchaser may be obligated to facilitate the maintenance, repair and operation by the contractor (e.g. by obtaining visas or work permits for the contractor's staff). The purchaser may wish to supply locally available equipment and materials needed for maintenance and repairs (paragraph 34).

The contract should specify when the obligations undertaken by the contractor as to the supply of spare parts, maintenance, repair and operation are to commence and also determine the duration of the obligations undertaken by the contractor. The duration may be the expected lifetime of the works, or a shorter period which is to be automatically renewed (paragraph 35 and 36). Where the contract imposes obligations on the contractor over a long duration, it may be desirable to include mechanisms (e.g. a periodic review) to modify the scope of obligations imposed on the contractor and the price payable by the purchaser. Even in cases where the scope of the contractor's obligations is not modified, a revision of the price payable may be required because the costs of the goods and services required to discharge those obligations have changed (paragraphs 37 and 38).

The contract may entitle the purchaser to terminate the contractor's obligations as to supply upon the giving of a specified period of notice. The purchaser may additionally be given the right to terminate for convenience at any time, subject to the payment of compensation if loss is suffered by the contractor through the termination (paragraph 39).

The parties may wish to provide for remedies other than termination which are to be available upon failure of performance by a party (e.g. damages, or liquidated damages and penalties) (paragraph 40).

A. General remarks

1. Even after the construction is completed and the works are ready to operate, the purchaser may need assistance which the contractor is able to supply. The normal operation of the works will entail the replacement by spare parts of equipment, components and machinery as they wear out. The purchaser will need to ensure that the works are properly maintained. Maintenance has primarily a preventive function: in the short-term, it prevents costly breakdowns, while in the long-term it

prevents the works from ceasing to operate in good order before the expiry of its expected lifetime. Despite regular maintenance, however, portions of the works may from time to time break down and need repair. Breakdowns may cause considerable loss to the purchaser, and he has a vital interest in seeing that repairs are carried out expeditiously. Repair therefore has primarily a curative function. Spare parts will have to be available to effect both maintenance and repairs.

- 2. At the time the construction is completed, the personnel of the purchaser may not have all the skills necessary for the technical operation of the works, and the purchaser may therefore wish the contractor to assist in its operation. The degree of the assistance can vary. The contractor may in some cases provide the personnel to man many of the technical posts in the works, while in other cases he may provide technical experts to collaborate with the personnel of the purchaser in a few highly specialized operations.
- 3. Operation of the works should be distinguished from training obligations which may also be undertaken by a contractor. For example, under a product-in-hand contract, the contractor is obligated to train the personnel of the purchaser, and to show during a test period specified in the contract that the works can be operated and agreed production targets achieved by the personnel using the raw materials and other inputs that the purchaser would use (see chapter II, "Choice of contracting approach"). Under other contracting approaches the contractor may be obligated to instruct the purchaser's personnel in operating specified items of equipment (see chapter VI, "Transfer of technology"). It may be essential for the purchaser that the contractor is obligated to supply spare parts and maintenance, repair and operation services after construction. Spare parts and repair services in particular may not be obtainable from any other source.

B. Contractual arrangements

4. The planning of the parties in regard to the supply of spare parts and services after construction would be greatly facilitated if at the time of the conclusion of the contract the parties could anticipate and provide in the works contract for the needs of the purchaser in respect of spare parts and services. Agreement between the parties on the extent of the spare parts and services to be supplied, the duration of the supply, and the price to be paid therefor, may be reached more easily at the time of the conclusion of the contract than at a later time. In some cases, however, the extent of the spare parts and services that will be needed by the purchaser may be uncertain at the time of the conclusion of the contract (e.g. the skilled personnel which will be locally available at the time of the completion of construction may not be predictable). In such cases, a possible approach is for the contract to identify the types of assistance the need for

which is uncertain (e.g. maintenance) and to provide that, if so requested by the purchaser before the completion of the construction, the contractor is obligated to provide such assistance as is required by the purchaser to the extent that the contractor has the capacity to supply it. The parties should agree on the basis for determining the price payable by the purchaser (see paragraphs 13, 21, 26 and 33, below). They should also include in the contract provisions on all issues on which agreement can be reached at the time of the conclusion of the contract (e.g. quality of spare parts or services, and conditions of payment).

5. An alternative approach towards meeting the difficulty that the purchaser's needs may be uncertain at the time of the conclusion of the works contract is to set forth the obligations of the parties in a separate contract. Such a contract may be concluded closer in time to the completion of construction, at which time the purchaser may have a clearer estimate of his needs.¹

C. Spare parts

- 6. The contractor is in the best position to ascertain the kinds, quantity, and quality of spare parts which will be needed during the operation of the works. Accordingly, a tenderer or a person with whom a contract is being negotiated may be required to supply prior to the conclusion of the contract (e.g. together with his offer to construct the works) a list of the spare parts and the quantities of spare parts which will be needed over a specified period (e.g. during the course of two years' operation of the works), the period of time after the commencement of operation of the works during which he is prepared to supply the spare parts, the prices at which he is prepared to supply those spare parts and the period of time for which he is prepared to maintain those prices. He may also be required to identify in the list which of the spare parts he will manufacture himself, and which spare parts he will obtain from suppliers.
- 7. The spare parts needed for the works usually fall into two categories. The first category consists of standard parts which are obtainable both from the contractor and from several other sources. The second category consists of non-standard parts which are obtainable only from the contractor.
- 8. As regards spare parts in the first category, they would normally be obtainable more cheaply and conveniently from sources other than the contractor than from the contractor. However, the contractor may be obligated to supply at the time of the completion of construction a limited stock to cover the time period elapsing between the commencement of operation of the works, and the
- ¹The Economic Commission for Europe has under preparation a guide on drawing up international contracts for services relating to maintenance, repair and operation of industrial and other works which will assist parties in drafting a separate contract or contracts dealing with maintenance, repair and operation.

- establishment by the purchaser of his own sources of supply. The contractor may also be obligated to indicate sources from which the spare parts may be obtained by the purchaser.
- 9. As regards spare parts in the second category, the purchaser has to obtain them from the contractor. The purchaser may find it advisable for the contractor to be obligated to supply by the time the construction is completed a large stock of such spare parts (e.g. sufficient for two year's operation of the works). The spare parts can then be produced at the same time that the equipment to be incorporated in the works is produced, and transported to the site together with the equipment, thus usually resulting in savings in production and transport costs. The purchaser may obtain an even larger stock if the contractor's prices are likely to be much higher in respect of spare parts supplied at a later stage.
- 10. Where non-standard spare parts are manufactured not by the contractor but for the contractor by suppliers, the purchaser may either obligate the contractor to supply the spare parts (it being the responsibility of the contractor to obtain them from suppliers) or the purchaser may himself enter into independent contracts with the suppliers. Where the purchaser wishes to contract with the suppliers, he may wish to engage the contractor as his agent in procuring the spare parts. The services to be supplied by the contractor should be agreed between the parties and might include contacting possible suppliers, obtaining competitive offers, determining the required quantities of spare parts, evaluating the offers, making recommendations as to purchase, and arranging for delivery.
- 11. In exceptional cases, the purchaser may have the technical capability to manufacture certain non-standard spare parts, and may wish to manufacture them (e.g. to conserve foreign exchange). In such cases the contract should obligate the contractor to supply the drawings and specifications necessary for their manufacture where it is feasible for him to do so. It may not be feasible if a spare parts item comes from a supplier, in particular if the supplier has industrial property rights in regard to that item.
- 12. Where the contractor has supplied an estimate of the quantity of spare parts needed over a given period of operation of the works, and the purchaser has purchased that quantity from the contractor, it may be discovered during actual operation that the estimate was incorrect, and that the purchaser needs an additional quantity. The contractor should be obligated in such circumstances to supply the additional spare parts at the prices at which they were previously supplied if the purchaser so requests within a specified period after the commencement of operation.
- 13. The parties should address issues connected with the ordering and delivery of spare parts. They should determine when delivery is to take place (e.g. some spare parts may be delivered automatically at specified intervals,

while others may be delivered upon order by the purchaser). They should also determine the manner in which orders are to be communicated, and the period following the order when delivery has to be made (e.g. within one month of delivery of the order). The purchaser may wish to stipulate that liquidated damages or penalties are payable for delay in delivery (see chapter XX, "Liquidated damages and penalty clauses"). With regard to the passing of risk, packaging, payment of customs duties and taxes, and other incidents of the delivery of the spare parts, the parties may wish to provide that such issues are to be settled in accordance with a well-recognized trade term (e.g. F.O.B., C.I.F.).2 The prices for the spare parts should be agreed upon on the basis of the prices quoted by the contractor (see paragraph 6, above). The parties should also agree upon the payment conditions applicable (e.g. the currency, time and place of payment).

- 14. The contract should determine the quality of the spare parts to be supplied. The contract may provide, for example, that they are to be of the same quality as the parts originally incorporated in the works, or provide that the quality must be in accordance with technical specifications set out in the contract. In addition, the contract should include a quality guarantee in respect of the spare parts under which the contractor assumes responsibility for defects discovered and notified before the expiry of a guarantee period (see chapter XVIII, "Delay, defects and other failures to perform"). Since spare parts supplied on a particular date may be put to use only at a later date, the determination of the length of the guarantee period and the time when the period commences to run may present difficulties. A possible approach may be to provide for a relatively short guarantee period commencing to run from the date the spare parts are put to use, and to provide further that, whether or not the spare parts are put to use, the guarantee expires at the end of a longer period commencing to run from the date of delivery of the spare parts.
- 15. After the works are constructed, the contractor may improve or re-design some of the items which he manufactures and which he has undertaken to supply as spare parts. Each party may have an interest in substituting the improved or re-designed items for the ones originally supplied. The contractor should therefore be obligated to inform the purchaser whenever improvements or re-designing takes place, so that, if the purchaser so wishes, negotiations may take place for the supply of the improved or re-designed spare parts instead of the spare parts originally agreed to be supplied.
- 16. It is desirable for the purchaser's personnel to develop the technical capability to install the spare parts. For this purpose, the contractor may be obligated to supply necessary instruction manuals, tools and equipment. If necessary, he should also be obligated to train the purchaser's personnel in installing the spare parts.

D. Maintenance

- 17. Certain operations are a necessary component of the maintenance of industrial works, e.g. periodic inspection of the works; lubrication, cleaning and adjustment; replacement of defective or worn out parts. Maintenance may also include such operations of an organizational character as establishing a maintenance schedule or a record of maintenance. A tenderer or a person with whom a contract is being negotiated may be required to indicate whether he is prepared to supply the maintenance services required by the works, and the duration for which he is prepared to supply them.
- 18. In order to assist the purchaser in maintaining the works, the contractor may be required to submit at the time of the conclusion of the contract a maintenance programme designed to keep the works operating at the efficiency required by the purchaser over the lifetime of the works. The contractor may also be required to supply maintenance manuals setting forth appropriate maintenance procedures. The purchaser may wish to engage a consulting engineer to review the maintenance programme and procedures submitted by the contractor. The purchaser would then be in a position to determine what part of the maintenance he may be able to undertake himself (e.g. depending on the skilled personnel he has available, the training obligations assumed by the contractor (see chapter VI, "Transfer of technology"), or the maintenance equipment the purchaser possesses). The contract should specify the items to be maintained (e.g. the entire works, or certain items of equipment) and define the maintenance obligations which the parties wish the contractor to undertake. If major items of equipment have been manufactured for the contractor by suppliers, the purchaser may find it preferable to enter into independent maintenance contracts with the suppliers, as they may be better qualified to maintain those items. Proof of proper maintenance may be facilitated by providing that the personnel of the purchaser are to be associated with the personnel of the contractor conducting the maintenance operations. This may also serve as an effective means of training the purchaser's personnel in maintenance operations.
- 19. The parties may wish to specify the standards to be observed by the contractor when performing maintenance work. If maintenance norms or standards established by professional bodies are available, the contractor's obligations may be described by reference to those norms or standards. Where such norms or standards are not available, the contract may specify that the maintenance is to be effected in a workmanlike manner. Another approach may be for the contractor to undertake that the standards of maintenance will be such that, over a specified period (e.g. one year), the portion of the works being maintained will operate in accordance with the contract for a specified percentage of its normal operating time over that period. Failure of the works to operate due to causes for which the contractor is not responsible (e.g. faulty operation by the purchaser's personnel) should be excluded from the scope of the undertaking.

²The trade term may be identified by reference to the *International Rules for the Interpretation of Trade Terms* (INCOTERMS) prepared by the International Chamber of Commerce (ICC) (ICC publication No. 350, 1980).

- 20. The contractor should be obligated to furnish a report on each maintenance operation immediately following the operation. The report should describe the maintenance activities undertaken. It should also set forth any defects discovered in the works, any repair work needed, or any maintenance work needed which is outside the scope of the contractor's obligations, together with an estimate of costs for carrying out the repair or maintenance work if it can be carried out by the contractor.
- 21. The main obligation of the purchaser will be the payment of the price. The price may be determined as a lump sum payable for all the obligations undertaken and costs thereby incurred by the contractor in respect of a maintenance operation. This approach may be appropriate when the maintenance operations are of a standard and routine character. Another approach may be to agree on unit rates for units of time expended on the various work processes involved in the maintenance. Yet another approach may be to provide that the contractor is to be paid a fee to cover his overhead and profit, while he is to be paid for his direct expenses on a cost reimbursable basis. The direct expenses for which the contractor is to be reimbursed should be clearly specified (see chapter VII, "Price").
- 22. The parties should also agree upon the payment conditions applicable. Thus such issues as the currency, place and time of payment should be settled in the contract (see chapter XV, "Price"). With regard to the time of payment, the contract may provide that payment is to be made within a specified period of time after the submission of an invoice by the contractor following the completion of each maintenance operation.

E. Repairs

- 23. The purchaser should enter into contractual arrangements which ensure a speedy repair of the works in the event of a breakdown. In many cases the contractor is better qualified than a third party to effect repairs. In addition, the use of third parties to effect repairs may result in the violation of obligations of secrecy binding on the purchaser in regard to the technology supplied by the contractor. If, however, major items of equipment have been manufactured for the contractor by suppliers, the purchaser may find it preferable to enter into independent contracts for repair with the suppliers, as they may be better qualified to repair those items. It should be noted that in defining the repair obligations imposed on the contractor, those obligations should be carefully distinguished from obligations assumed by the contractor under guarantees of quality to make good defects in the works which are notified to the contractor during the guarantee period (see chapter XVIII, "Delay, defects and other failures to perform").
- 24. The contractor's repair obligations should be clearly defined. The extent of the obligations to be imposed on

- the contractor may depend on the repair capabilities of the contractor, and on whether the purchaser wishes to undertake certain repair operations himself (e.g. replacement of minor items of defective equipment). However, the obligation of the contractor cannot be described in terms of specific repair operations, since the repair operations needed will depend on the nature of a particular breakdown.
- 25. Because repairs may have to be undertaken speedily, the contract should clearly settle the procedures for calling on the contractor to effect repairs. The contract should specify the modes by which the contractor can be notified of a breakdown (e.g. telex, telephone), and the period of time after notification within which the contractor must inspect the breakdown.
- 26. The contract may also specify that, where repairs do not have to be undertaken immediately, the contractor must submit to the purchaser within a specified period of time a report describing the repairs needed, an estimate of costs, and a time-schedule for effecting the repairs. Once the report has been submitted by the contractor, the parties may thereafter agree on the terms for effecting the repairs. If the repairs are extensive, it would be advisable for the agreement to be reduced to writing. The contract may provide that, if the parties fail to reach agreement on the time-schedule, it is to be determined by a technical expert nominated under the contract (see chapter XXIX, "Settlement of disputes"). If the parties fail to reach agreement on the price payable for effecting the repairs, the contract may provide for payment on a cost reimbursable basis (with the contractor being paid reasonable costs incurred by him in effecting the repairs, and a fixed amount as a fee). However, in cases where the purchaser needs to make the works operational in the shortest possible time, he may dispense with the submission by the contractor of cost estimates and a timeschedule for effecting repairs, and the parties may agree that the repairs are to be effected on a cost reimbursable basis.
- 27. The parties should agree upon the payment conditions applicable. Thus, such issues as the currency, place and time of payment should be settled in the contract. With regard to the time of payment, the contract may provide that payment is to be made within a specified period of time after the submission of an invoice by the contractor following the completion of a repair operation. If the contractor is to be obligated to inspect a breakdown within a short period after notification of a breakdown, the purchaser may have to pay a fee to cover the contractor's costs in always having personnel in readiness for an inspection.
- 28. The parties may wish to specify the standards to be observed by the contractor when effecting repairs, either by reference to established norms and standards, or by specifying that the repairs are to be effected in a workmanlike manner (see paragraph 19, above).
- 29. The purchaser will wish to have proof that the repairs have been duly carried out, and the parties should

agree on how such proof is to be furnished. After the completion of repairs, the contractor should be obligated to furnish a report describing the repair work effected, any repair work which may be needed in the future, and the causes of the breakdown. The report may be supported by records evidencing the time expended by various categories of personnel, and the work processes used. In some cases, proper repair may be proved through a joint inspection by the parties of the repairs, while in others the contractor may furnish such proof through the successful operation of the works. Proof of proper repair may be facilitated by providing that the personnel of the purchaser are to be associated with the personnel of the contractor undertaking the repair operations. This may also serve as an effective means of training the purchaser's personnel in the techniques associated with repair operations. If the parties fail to agree on whether there has been proper repair, the issue may be referred for settlement to a technical expert nominated under the contract (see chapter XXIX, "Settlement of disputes"). The contractor should also be required to give a guarantee under which he assumes responsibility for defects in the repair discovered and notified to him before the expiry of a specified guarantee period.

30. While repairs would normally be carried out at the site, or elsewhere in the country where the works are situated, in some cases it may be necessary to send an item to the contractor's country for repair. The purchaser may be obligated to arrange for the transport of the item to the contractor's country, and for any necessary insurance of the item up to the time of delivery to the contractor. The contractor may be obligated to assist the purchaser to make such arrangements (e.g. advise on proper packing, obtain import permits which may be necessary in his country). The contractor may be obligated to arrange for the transport of the item after repair to the purchaser's country, and for any necessary insurance. The contract should determine who is to bear the expenses involved.

F. Operation

31. If the contract imposes obligations on the contractor with regard to the technical operation of the works, the scope of these obligations should be carefully defined. For this purpose the purchaser and contractor in consultation should prepare an organizational chart showing the personnel required for the technical operation, and the functions to be discharged by each person. The positions to be occupied by personnel who are employees of the contractor may then be identified, and the qualifications and experience of those persons may be specified. The functions allotted to posts to be filled by employees of the contractor should be defined with particular care. In determining what personnel are to be supplied by the contractor, the parties should take account of any mandatory regulations which may exist in the country of the purchaser regarding employment of foreign personnel.

- 32. The contract should determine the nature of the division of control between the purchaser and contractor during the operation of the works. It may, for example, be necessary for the general manager employed by the purchaser to give certain directives to engineers who are employees of the contractor based on policy decisions taken by the general manager. Conversely, the engineer supplied by the contractor may have to issue directions to subordinate engineers employed by the purchaser. In order to avoid friction and inefficiency, the division of control should be described as clearly as possible. In particular, the parties may wish to provide a procedure for dealing with complaints by one party against the other (e.g. incompetence, inefficiency, failure to follow directions). They may, for example, agree that such complaints are to be investigated by a panel composed of a senior executive officer of each party. The contract may provide that, if specified serious complaints against employees are held to be proved, those employees must be replaced by the party who engaged them at his own expense within a specified period of time. However, the purchaser should be entitled to require the contractor to replace at the purchaser's expense any employee of the contractor, even in the absence of a proved complaint against that employee.
- 33. The main obligation of the purchaser is the payment of the price. Where a reasonable estimate can be made of the costs to be incurred by the contractor, the price may be determined as a lump sum payable for all the obligations undertaken by the contractor over a specified period. Another approach may be to combine the payment of fixed amounts with the cost reimbursable method (i.e. the reimbursement of costs incurred by the contractor together with the payment of a fee). Thus, fixed amounts may be provided in respect of items for which reasonable cost estimates can be made (e.g. the salaries of the personnel to operate the works, the cost of their accommodation and travel) and the cost reimbursable method provided for the remaining items of expenditure. In cases where the operational functions performed by the contractor are closely linked to the productivity and profitability of the works, the purchaser may wish to consider the additional payment of an incentive fee (e.g. a specified percentage of the value of the yearly turnover). The parties should also agree on the payment conditions applicable. Thus such issues as the currency, place and time of payment should be settled in the contract.

G. Facilitation by purchaser of services to be provided by contractor

34. The purchaser may be obligated to facilitate in specified ways the maintenance, repair and operation by the contractor. Thus the purchaser may be obligated to assist the contractor to obtain visas or work permits for the contractor's staff, to give safe access to the works to the contractor, to inform the contractor of alterations to

the original construction of the works which may influence the maintenance, repair, and operation, to comply with safety regulations applicable to the works, and to inform the contractor of mandatory safety regulations to be observed during the conduct of maintenance, repair and operation. The purchaser may wish to assume the obligation of supplying locally available equipment and materials needed for maintenance and repairs, as such supply may reduce costs. The contractor may be obligated to state his requirements as to such equipment and materials. In addition, the purchaser may be obligated to provide other facilities such as accommodation and transport to the contractor's personnel. If he is so obligated, the contract should determine which party is to bear the costs of providing such facilities.

H. Commencement and duration of obligations of parties

- 35. The contract should specify when the obligations undertaken by the contractor as to the supply of spare parts, maintenance, repair and operation are to commence. The supply of spare parts may commence from the estimated date that the purchaser will need them, taking into account the initial stock supplied by the contractor (see paragraph 9, above). The date of commencement of the maintenance obligations may depend on other obligations undertaken by the contractor. Thus, if the contractor has undertaken complete responsibility for the operation of the works for a specified period of time after acceptance of the works by the purchaser, maintenance obligations might commence after the expiry of that period. Repair obligations may commence from the date of expiry of the quality guarantee assumed by the contractor in respect of the works. The date of commencement of the obligations of the contractor in regard to operation may be fixed having regard to the other conditions which have to be satisfied before the works can commence to operate (e.g. availability of the staff to be employed by the purchaser).
- 36. The contract should determine the duration of the obligations undertaken by the contractor as to the supply of spare parts, maintenance, repair and operation. The duration of the obligations may be the expected lifetime of the works. Alternatively, the duration may be shorter. For example, it may be determined by reference to the training programme for the personnel of the purchaser, the contract providing that the contractor's obligations are to end when the purchaser has developed the capability to provide the services himself. Obligations as to training which may be imposed on the contractor are dealt with in chapter VI, "Transfer of technology". Where a shorter duration for the contractor's obligations is agreed but the purchaser is not certain that he will be self-sufficient at the expiry of that period, the contract may provide that, unless the renewal is prevented, the contractor's obligations are to be renewed automatically for further periods of the same duration, subject to changes in the scope of services to be provided by the

contractor and the price to be paid by the purchaser (see paragraphs 37 and 39, below).

- 37. Where the contract imposes obligations on the contractor over a long duration, it may be desirable to include mechanisms to modify the contract terms, in particular as to the scope of obligations imposed on the contractor, and the price payable by the purchaser. The purchaser may increase his own capabilities, and with such increase wish to assume certain services originally provided by the contractor. Conversely, it may transpire during the operation of the works that the purchaser cannot provide certain services which he had assumed he could provide, and he may wish the contractor to provide those services. Any change of the scope of obligations undertaken by the contractor would usually require an adjustment of the price. Accordingly, the contract may provide that the scope of obligations and the price are to be periodically reviewed and agreed upon by the parties (e.g. every two years, or at each renewal of the contract) and that the purchaser is entitled at the review to request a reduction or increase in the scope of obligations. The contract may provide that the contractor is not obligated to comply with a request for increased services if he does not have the capacity to provide them.
- 38. Even in cases where the scope of the contractor's obligations are not changed at a periodic review, a revision in the price payable may be required because the cost of the goods and services required to discharge these obligations has changed. The parties may wish to provide that at each periodic review changes in cost are to be taken into account, and a new price agreed upon if necessary. Alternatively, the parties may link the price payable to an appropriate price index, if one is available. The price may then automatically be revised in accordance with changes in the index (see chapter VII, "Price"). The index should be structured in accordance with the particular circumstances of the obligation, the price of which is to be revised. Therefore, it is usually not suitable to adopt the same index used for revision of the price for the construction of the works in respect of the obligations of the contractor dealt with in this chapter.

I. Termination

39. The parties may also wish to regulate the termination of the obligations as to the supply of spare parts, maintenance, repair, and operation. Where the duration of the obligations is a single specified period, the contract may permit the purchaser to terminate the obligations prior to the end of that period upon giving the contractor a specified period of notice. The specified period of notice should be sufficiently long to enable the contractor to phase out without suffering loss the arrangements he has made to fulfil his obligations. As a further protection to the contractor, it may be provided that the notice may be given only after the supply has continued for a specified length of time. Where the duration of the

obligations consists of a period which is subject to renewal (see paragraph 36, above), the purchaser can prevent the renewal by the giving of a specified period of notice of non-renewal, such period of notice to expire at the end of the initial or of a renewed period of the contractor's obligations. Whether the duration consists of a single specified period or of periods which are successively renewed, the purchaser may in addition be given the right to terminate for convenience at any time, subject to the payment of compensation if loss is suffered through the termination by the contractor (see chapter XXV, "Termination of contract"). The purchaser may wish to have such a right to deal with a situation where he is unexpectedly able to obtain from other sources at lesser cost the spare parts and services provided by the contractor. The contract may also provide for termination by either party for specified failures of performance by the other party, for bankruptcy or insolvency of the other party, or where performance by the other party is prevented for a specified period by exempting impediments (see chapter XXV, "Termination of contract").

J. Remedies other than termination

40. The parties may wish to provide for remedies other than termination which are to be available upon failure of performance by a party. They may wish to select such remedies as are appropriate out of those which they have provided for failures of performance during construction (see chapter XVIII, "Delay, defects and other failures to perform", chapter XIX, "Liquidated damages and penalty clauses" and chapter XX, "Damages"). Alternatively, they may leave the remedies to be determined by the applicable law.

[A/CN.9/WG.V/WP.17/Add.6]

Chapter XXIX. Settlement of disputes

Summary

Disputes arising in connection with works contracts may require treatment which differs from the treatment of disputes arising under other types of contracts. This may be due, for example, to the complexity and comprehensiveness of works contracts and the fact that a number of entities may participate in the construction. Disputes may relate to technical matters and require a rapid settlement (paragraph 1). Decisions to be made concerning disputes arising in connection with a works contract may relate not only to failures of performance, but also to failures of agreement or consent (section G). Interim measures may also have to be taken pending the final settlement of a dispute (paragraph 2).

The mechanisms for the settlement of disputes provided in the contract might include negotiation (section

B), conciliation (section C), arbitration (section D) and judicial proceedings (section E). An independent expert may also be authorized to settle disputes (section F). The contract might also provide for the multiparty settlement of disputes (section H) (paragraph 3).

A settlement of a dispute reached through negotiation between the parties could be expected to be broadly acceptable to both parties, and save the cost and delay which normally occur in the settlement of disputes by other means (paragraph 5). The contract may require negotiation between the parties and provide for the relationship of settlement through negotiation to settlement of the dispute in arbitral or judicial proceedings (hereinafter collectively referred to as legal proceedings) (paragraph 6). A negotiated settlement of a dispute may be reduced to writing and signed by both parties (paragraph 7).

If the parties fail to settle their disputes through negotiation, they may wish to resort to conciliation, in which a third party conciliator suggests possible solutions to the disputes (paragraphs 8 and 9). Conciliation may enable a good business relationship to be preserved, and is usually less costly and time-consuming than legal proceedings (paragraph 10). The parties may wish to provide for conciliation under the UNCITRAL Conciliation Rules (paragraph 11).

Disputes arising from works contracts are frequently settled through arbitration. Arbitration may offer certain advantages over judicial proceedings. For example, the parties can appoint as arbitrators persons of their choice who have expert knowledge of the subject-matter of the dispute, and they can choose the place where the arbitral proceedings are to be conducted (paragraph 12). Arbitration may be conducted only on the basis of an agreement by the parties to arbitrate. Such agreement may take the form of an arbitration clause included in the contract. If proceedings are instituted in a court on a matter which is covered by the arbitration clause, the court will normally refer the dispute to arbitration (paragraphs 13 and 14).

It may be advisable for the parties to agree that the arbitral proceedings are to be regulated by a set of arbitration rules of their choice.

The parties frequently select an arbitration institution to administer the arbitral proceedings and agree that the proceedings are to be regulated by the rules of that institution (paragraphs 15 and 16). As another possibility, they may agree that a set of arbitration rules prepared by an international organization (e.g. the UNCITRAL Arbitration Rules) are to apply. The parties may find it advisable to agree on certain issues related to the arbitration (paragraphs 17 and 18).

The parties may wish in particular to agree in the arbitration clause on the number of arbitrators who are to comprise the arbitral tribunal, and to designate an appointing authority to appoint the arbitrators in the event that they do not agree on the appointment (para-

graphs 19 and 20). They should also designate the language to be used in the arbitral proceedings (paragraph 21). They may also wish to specify the place where the arbitration is to take place. Selection of the place of arbitration may be significant for several reasons (paragraphs 22 to 24).

In some cases the parties may wish to agree that the place of arbitration is to be in the country of the party against whom a claim is brought (paragraph 25). It is advisable for the parties to be cautious in authorizing the arbitral tribunal to decide ex aequo et bono, since such an authorization may be interpreted in different ways (paragraph 26).

The parties should decide what disputes they wish to have settled by arbitration, and reflect their decision in the arbitration clause (paragraph 27). They may wish to authorize the arbitral tribunal to order interim measures of protection (paragraph 28). It may be advisable to stipulate in the arbitration clause that the parties are obligated to comply with arbitral decisions (paragraph 29).

Where the parties wish their disputes to be settled in judicial proceedings, it would be advisable for the contract to include an exclusive jurisdiction clause which reduces uncertainty in respect of court jurisdiction (paragraphs 30 to 32). The validity and effect of the contemplated exclusive jurisdiction clause should be considered in the light of the law of the country of the selected court, as well as the law of the countries of the two parties (paragraph 33). The parties should consider to what extent decisions of the selected court might be enforceable in the countries of the two parties (paragraph 34). It is advisable to provide that a particular court in the place where the judicial proceedings are to be instituted is to have jurisdiction (paragraph 35).

The use of an expert may be advisable when disputes of a technical nature require a rapid settlement (e.g. the procedure to be followed can be informal and structured to suit the kinds of disputes to be settled). On the other hand, there are only limited legal safeguards to ensure that proceedings before an expert are conducted carefully and impartially, and the decision of an expert cannot be directly enforced if a party fails to comply with it. It may therefore be preferable to request an expert to act as a sole arbitrator unless there are good reasons why he should not act in that capacity (paragraphs 36 and 37).

The parties may designate an expert in the contract, or provide in the contract for a procedure for the appointment of an expert after a dispute has arisen (paragraphs 40 to 43).

The contract may provide that a party has the right to initiate legal proceedings without being obligated first to propose that the dispute be settled by an expert, or may provide that legal proceedings cannot be initiated before the expiry of a specified period from the time that one party proposes to the other that the dispute be settled by

an expert (paragraph 44). The contract may also determine in what circumstances an expert is to cease to act when legal proceedings are initiated in respect of the dispute being settled by him (paragraph 45).

The contract should describe the nature of the issues with which the expert is authorized to deal (paragraph 46). The action to be taken by the expert in dealing with such issues may take various forms. He may be empowered to make findings of fact, to decide on the taking of interim measures, to decide on failures of performance, and to make decisions where there has been a failure of agreement or consent. The contract may contain provisions on the extent to which the decisions of the expert are to be reviewable in legal proceedings (paragraphs 47 to 49). The parties should be obligated under the contract to comply with the decisions of the expert (paragraph 50).

The parties may provide that the contract is to be supplemented after its conclusion by provisions agreed to by the parties. It may also provide that the contract is to be adapted by agreement if certain changes of circumstance occur during its performance. The parties may fail to agree on the required supplementation and adaptation. A party may also fail to give a consent required to be given under the contract. However, failures of agreement or consent may occur. The resolution of disputes concerning supplementation or adaptation requires the creation of new contractual rights and duties. The resolution of disputes concerning the failure to give a consent requires the making of a decision by a third party which has the effect of the required consent (paragraph 51).

Under some legal systems a court or arbitral tribunal is not entitled to create new contractual rights and obligations, or to make a decision which takes the place of a required consent. However, under many legal systems an expert may be so authorized (paragraph 52). Where the applicable legal system so permits, a court, arbitral tribunal or expert may be empowered to create new contractual rights and obligations or to make a decision which takes the place of a required consent (paragraph 53).

The clause on the settlement of disputes should determine the legal consequences of decisions dealing with the types of disputes referred to in the immediately preceding paragraph. The parties may wish to indicate in the contract the criteria to be taken into consideration in reaching such decisions (paragraphs 54 and 55).

A problem arising in connection with the construction of the works may involve several entities participating in the construction. It may be desirable for the rights and obligations of all entities involved in a dispute or related disputes to be resolved in the same proceedings, referred to in this Guide as "multi-party proceedings" (paragraph 58).

Many States have laws which provide for and regulate multi-party judicial proceedings. However, few States at present have a legal framework regulating multi-party arbitral proceedings. The conduct of those proceedings therefore depends entirely upon the agreement of the entities participating in the proceedings (paragraphs 59 and 60).

Notwithstanding the absence of a legal framework to support the structuring of multi-party arbitral proceedings, the parties may wish to endeavour to provide for such proceedings by agreement. The agreement of entities to participate in multi-party arbitral proceedings may be in the form of harmonized arbitration clauses in their different contracts, or a single separate arbitration agreement among all entities. In the latter case, it would be preferable for each entity to become a party to the separate agreement contemporaneously with his entering into a works contract, or a contract linked to a works contract, rather than to attempt to conclude a multi-party arbitration agreement after a dispute actually arises (paragraphs 61 and 62).

The arbitration clauses or separate arbitration agreement should provide a mechanism whereby arbitral proceedings involving all entities relevant to a dispute or related disputes are conducted before the same arbitral tribunal (paragraph 63). They should also define the scope of the multi-party proceedings (paragraph 64). The parties should give careful consideration to the choice of rules which are to govern the multi-party proceedings (paragraph 65).

If it is found not to be possible to structure an arrangement for multi-party proceedings, the parties may wish to attempt in other ways to reduce the possibilities of inconsistencies in decisions in two-party arbitrations involving related disputes (paragraph 66).

A. General remarks

- 1. Disputes arising in connection with works contracts may require treatment which differs from the treatment of disputes arising under other types of contracts. The complexity and comprehensiveness of works contracts, the fact that they are to be performed over a relatively long period of time (sometimes several years), and the fact that a number of entities may participate in the construction of the works require special mechanisms for the settlement of disputes and the making of various types of decisions (see paragraph 2, below). Disputes may concern highly technical matters connected with the construction process (e.g. those relating to standards for equipment and materials to be incorporated in the works) or purely legal matters (e.g. the legal consequences of a failure to perform). In addition, disputes often arise during construction, which must be resolved without an interruption of the construction.
- 2. The decisions to be made and measures taken in connection with a works contract cover a broad spectrum.

For example, it may have to be decided whether or not one party has failed to perform his obligations and, if so, what are the consequences of the failure. The contract may provide that some of its terms are to be adapted by the parties to meet a change in the circumstances existing at the time of its conclusion. In addition, the contract may provide that some of its terms are to be agreed upon after its conclusion, and the contract thereby supplemented. The contract may also require the consent of a party to be given in certain situations. Disputes concerning a failure of the parties to agree upon the adaptation or supplementation of the contract, or concerning a failure to give the consent, may require that a dispute settlement procedure be used in which the decision has the effect of an agreement of the parties or the consent of a party (see section G, "Disputes concerning failure of agreement or consent", below). In addition, interim measures may have to be taken in order to protect certain rights of a party to a dispute pending a final settlement of the dispute.

- 3. The parties should provide in the works contract mechanisms to deal in the most appropriate and expeditious manner with the various types of disputes. The contract might include provisions concerning the settlement of disputes by the parties through negotiation (see section B, "Negotiation", below) or by conciliation (see section C, "Conciliation", below). It might also provide for arbitration (see section D, "Arbitration", below), or contain provisions dealing with judicial proceedings (see section E, "Judicial proceedings", below). The contract might also provide in some cases for an independent expert to settle disputes (see section F, "Settlement of disputes by experts", below). The contract might provide for the multi-party settlement of disputes (see section H, "Multiparty settlement of disputes", below).
- 4. If a dispute of any kind arises between the parties, each party should be obligated under the contract to proceed with the performance of his obligations despite the dispute, unless the contract has been terminated or the performance suspended in accordance with contractual provisions or the law applicable to the contract. Even in cases where a party has terminated a contract or suspended performance, and the termination or suspension is in dispute, the arbitral tribunal or a court or an expert may be empowered to decide that the contractor is to proceed with his construction obligations pending the settlement of the dispute.

B. Negotiation

5. The settlement of a dispute by the parties themselves through negotiation is usually the most satisfactory method of dealing with the dispute. A settlement reached through negotiation could be expected to be broadly acceptable to both parties. In addition, the parties may be saved the considerable cost and delay which normally occur in the settlement of disputes by other means. In order to facilitate the settlement of future disputes by

negotiation, the contract may contain certain provisions dealing with the procedure to be followed.

- 6. The contract sometimes provides that in the event of a dispute arising from the contract a party can initiate arbitral or judicial proceedings (hereinafter collectively referred to as legal proceedings) for settlement of the dispute only if the parties have previously failed to agree upon a settlement by negotiation within a specified period of time. This period may commence to run when a written proposal as to how the dispute may be settled has been delivered by one party to the other. The period of time specified by the parties should not be long, as otherwise an early settlement of the dispute in legal proceedings may not be possible. Either party may be permitted under the contract to initiate legal proceedings before the expiry of the specified period of time if the party receiving a proposed settlement refuses it and states that he is not prepared to negotiate further. In addition, either party may be permitted to initiate legal proceedings before the expiry of the specified period of time if the initiation is needed to prevent the loss of a right, or the expiry of a prescription period.
- 7. It is advisable for the contract to require an agreement between the parties settling a dispute to be reduced to writing and signed by both parties. If the agreement involves the interpretation of the contract, or adaptation or supplementation of contractual terms, the contract may require the parties to indicate that the agreement forms an integral part of the contract.

C. Conciliation

- 8. If the parties fail to settle their disputes through negotiation, they might not wish to resort immediately to legal proceedings. The contract may therefore contain provisions for the settlement of disputes by conciliation.
- 9. The purpose of conciliation is to achieve an amicable settlement of the dispute with the assistance of an independent third-party conciliator respected by both parties. The settlement of the dispute remains in the hands of the parties. In contrast to an arbitrator or judge, the conciliator does not adjudicate, but assists the parties in reaching a settlement by suggesting possible solutions to the parties in an impartial manner.
- 10. The main advantage of conciliation over legal proceedings is that the non-adversary character of conciliation may enable a good business relationship between the parties to be preserved, while legal proceedings could adversely affect the relationship. In addition, conciliation proceedings are usually less costly and time-consuming than legal proceedings. On the other hand, a potential disadvantage of conciliation is that, if the attempt at conciliation were to fail, the money and time spent on it may have been wasted. This disadvantage might be mitigated if the contract did not require the parties to engage in conciliation proceedings before they initiated

legal proceedings. The parties would then initiate conciliation proceedings only in cases where they considered that a real likelihood of an amicable settlement existed.

11. Many legal systems contain no special rules governing conciliation proceedings. Accordingly, a number of issues arising in the proceedings need to be settled by the parties in order to make the proceedings effective. It is not feasible to settle all these issues in the body of the contract, and the use of a set of rules on conciliation prepared by an international organization is advisable. The parties may wish to incorporate by reference in the contract the UNCITRAL Conciliation Rules, 1 a comprehensive set of rules the use of which has been recommended by the United Nations General Assembly in its resolution 35/52 of 4 December 1980.

D. Arbitration

12. Disputes arising from works contracts are frequently settled through arbitration. International commercial arbitration may offer certain advantages over judicial proceedings. The parties can appoint as arbitrators persons of their choice who have expert knowledge of the subject-matter of the dispute. They can also choose the place where the arbitral proceedings are to be conducted. In addition, arbitral proceedings could be structured by the parties so as to be less formal than judicial proceedings and better suited to the specific features of the subject-matter of the dispute and the needs of the parties. The choice by the parties of the law applicable to the contract will almost always be respected by an arbitral tribunal, while this might not be the case in some judicial proceedings. Arbitral proceedings and awards can be kept confidential, while judicial proceedings and decisions usually cannot. Furthermore, arbitral proceedings tend to be more expeditious and in some cases less costly than judicial proceedings. Finally, as a result of international conventions which assist in the recognition and enforcement of foreign arbitral awards, these awards are frequently recognized and enforced more easily than are foreign judicial decisions.² However, while under some legal systems multi-party proceedings may be initiated in a court, it is difficult to arrange for those proceedings in arbitration (see section H, "Multi-party settlement of disputes", below).

¹Report of the United Nations Commission on International Trade Law on the work of its thirteenth session, Official Records of the General Assembly, Thirty-fifth Session, Supplement No. 17 (A/35/17), para. 106. The UNCITRAL Conciliation Rules have also been reproduced in booklet form (United Nations publication, Sales No. E.81.V.6). Accompanying the Rules is a model conciliation clause, which reads: "Where, in the event of a dispute arising out of or relating to this contract, the parties wish to seek an amicable settlement of that dispute by conciliation, the conciliation shall take place in accordance with the UNCITRAL Conciliation Rules as at present in force".

²A broad enforceability of arbitral awards is established under the Convention on the Recognition and Enforcement of Foreign Arbitral Awards, adopted in New York on 10 June 1958 (Register of Texts of Conventions and other Instruments concerning International Trade Law, vol. II, p. 24 (United Nations publication, Sales No. E.73.V.3) or United Nations, Treaty Series, vol. 330, No. 4739, p. 38).

- 13. In general, arbitral proceedings may be conducted only on the basis of an agreement by the parties to arbitrate. Their agreement may be reflected either in an arbitration clause included in the contract, or in a separate arbitration agreement concluded by the parties before or after a dispute has arisen. Since it may be more difficult to reach an agreement to arbitrate after a dispute has arisen, it is advisable either to include an arbitration clause in the contract, or to enter into a separate arbitration agreement at the time that the contract is concluded. However, under some legal systems, an agreement to arbitrate is valid only if it is concluded after a dispute has arisen.
- 14. The arbitration clause should indicate the disputes which are to be settled by arbitration (see paragraph 27, below). If proceedings are instituted in a court on a matter which is covered by the arbitration clause, the court will normally, upon the request of a party within a time period specified in its law, refer the dispute to arbitration. Notwithstanding an arbitration clause, the competent court usually has authority to order interim measures of protection, to control certain aspects of arbitral proceedings (e.g. to decide on a challenge to arbitrators) and to set aside arbitral awards on grounds determined by the law applicable to the arbitration.

1. Arbitral proceedings

15. The law applicable to the arbitration, which is usually the arbitration law in force at the place where the arbitration is conducted, will regulate many issues arising in the arbitral proceedings. The law applicable to the arbitration usually gives wide autonomy to the parties to agree upon the procedure to be followed in the arbitration. Since this law may not regulate some issues arising in the arbitral proceedings, or may not regulate them in a satisfactory manner, it may be advisable for the parties to agree that the arbitral proceedings are to be regulated by a set of arbitration rules of their choice.

(a) Rules to regulate arbitral proceedings

Arbitration institutions offer services ranging from merely appointing arbitrators to full administration of the arbitral proceedings. The parties may wish to consider the extent to which they wish to make use of those services. Parties which have selected an arbitration institution to administer the arbitral proceedings frequently agree that the proceedings are to be regulated by the rules of that institution, if they consider the content of the rules to be acceptable. Some arbitration institutions are ready to administer the arbitral proceedings only when the parties agree that the arbitration rules of the institution are to apply. A number of arbitration institutions apply the UNCITRAL Arbitration Rules (see immediately following paragraph) as their own rules, in some cases with certain supplementations needed to conform to the statutes of or administrative services offered by those institutions.

- 17. Several international organizations have prepared arbitration rules3 which can be made applicable by agreement of the parties in cases where no arbitration institution has been selected to administer the arbitral proceedings. The UNCITRAL Arbitration Rules,4 the use of which was recommended by the United Nations General Assembly in its resolution 31/98 of 15 December 1976, are widely used in these cases. Certain institutions, while having their own arbitration rules, are prepared to apply the UNCITRAL Arbitration Rules to arbitration proceedings administered by them if the parties so desire. Certain other institutions which offer less comprehensive services than full administration of arbitration proceedings have declared their willingness to act as an appointing authority for the appointment of arbitrators (see paragraph 20, below) and to provide other administrative services in arbitrations under the UNCITRAL Arbitration Rules if the parties so desire.
- 18. Arbitration rules prepared by international organizations usually give the parties autonomy to adapt the rules to their particular needs. However, some limitation to the autonomy is usually imposed in the rules of arbitration institutions in regard to services offered by those institutions. The solutions provided by the arbitration rules to certain issues normally apply only if the parties have not agreed on those issues. The parties may find it advisable to agree, in particular, on the number of arbitrators, the place of arbitration, and the language to be used in the arbitration proceedings (see footnote 7, below, paragraph (7)(a), (b) and (c)).

(b) Appointment of arbitrators

19. The parties may wish to specify in the arbitration clause the number of arbitrators who are to comprise the arbitral tribunal. Works contracts often provide for three arbitrators. Three arbitrators might bring to the proceedings a broad range of legal and technical expertise. However, the parties might wish to consider the possibility of providing for only one arbitrator. Proceedings before a single arbitrator are less costly than before three arbitrators, and it is easier to schedule proceedings before one arbitrator. Since it may be impossible at the time of the conclusion of the contract to envisage the complexity and nature of a potential dispute, another possibility may be for the parties to agree on the number of arbitrators after a dispute has arisen. If they fail to reach agreement, the rules which govern the arbitral proceedings will determine the number of arbitrators.

⁴Report of the United Nations Commission on International Trade Law on the work of its ninth session, Official Records of the General Assembly, Thirty-first Session, Supplement No. 17 (A/31/17), para. 57. The UNCITRAL Arbitration Rules have also been reproduced in booklet form (United Nations publication, Sales No. E.77.V.6).

³Arbitration Rules of the United Nations Economic Commission for Europe (Register of Texts of Conventions and other Instruments concerning International Trade Law (United Nations publication, Sales No. E.73.V.3), vol. II, p. 100 or Arbitration Rules of the United Nations Economic Commission for Europe (United Nations publication, Sales No. E.70.II.E/Mim.14)); Rules for International Commercial Arbitration and Standards for Conciliation of the United Nations Commission for Asia and the Far East (Register of Texts of Conventions and other Instruments concerning International Trade Law, (United Nations publication, Sales No. E.73.V.3), vol. II, p. 95).

20. Arbitrators are normally appointed by agreement of the parties. When the arbitration is not to be administered by an arbitration institution, the parties should designate in the arbitration clause an appointing authority to appoint the arbitrators in the event that they do not agree as provided for under the arbitration clause (see footnote 7, below, paragraph (7)(d)). The appointing authority may be an institution or a person (e.g. the president of a specified chamber of commerce). The parties should make sure that the chosen institution or person is willing and will be available to appoint the arbitrator. The UNCITRAL Arbitration Rules provide a procedure for designating an appointing authority where no appointing authority is agreed upon by the parties, or where the appointing authority agreed upon fails to appoint arbitrators.5

(c) Language to be used in arbitral proceedings

The parties may also wish to designate in the arbitration clause the language to be used in the arbitral proceedings. The choice of the language may influence the expeditious conduct and the cost of the arbitral proceedings. Whenever possible, the parties should designate a single language. When more than one language is designated, the costs of translation and interpretation between one designated language and the other are usually considered to be part of the costs of arbitration and are apportioned in the same way as the other costs of arbitration. In many cases, it would be desirable for the designated language to be the language in which the contract is written. The written pleadings, testimony at a hearing, the award, and other decisions or communications by the arbitrators may be required to be in or be translated into the designated language. The arbitrators may be empowered to admit documents as evidence in their original language.

(d) Place of arbitration

22. The arbitration clause may specify the place where the arbitration is to take place. In selecting the place, the parties should note that the arbitration law in that place will often determine what disputes are arbitrable, and also resolve certain other issues arising in arbitral proceedings (see paragraph 15, above). An international treaty resolving certain issues arising in arbitral proceedings may also apply in the country where the arbitration is to take place. A number of states, including several states outside Europe, are contracting parties to the European Convention on International Commercial Arbitration prepared by the United Nations Economic Commission for Europe.⁶

23. In deciding the place of arbitration, the parties should anticipate the need to enforce the award. For

⁵In such cases either party may request the Secretary-General of the Permanent Court of Arbitration at The Hague, Netherlands, to designate an appointing authority.

⁶See Register of Texts of Conventions and other Instruments concerning International Trade Law (United Nations publication, Sales No. E.73.V.3), vol. II., p.34 or United Nations, Treaty Series, vol. 484, No. 7041, p. 364.

instance, in deciding upon the country where the proceedings are to take place, the parties should consider whether awards made in that country would be enforceable in the country of each party on the basis of international conventions or the applicable municipal laws. Or, they may wish to provide that arbitral proceedings are to take place in a country where both parties have assets against which execution of an award may be made.

24. If the parties have chosen an arbitration institution to administer the arbitration, they should specify a location for the arbitration where that institution is able to perform its functions. Whether or not they have chosen an arbitration institution to administer the arbitration, in choosing the place of arbitration the parties should in any event take into consideration such factors as the convenience of the parties, the availability of communications and other support services, the arbitration law in force and, in particular, what disputes are arbitrable under that law, and the cost of conducting an arbitration at that place.

25. In some cases, the parties may wish to agree that the place of arbitration is to be in the country of the party against whom a claim is brought. This may facilitate the enforcement of the award against that party in his country, since the award would not be considered a foreign award in that country. They may so agree when the arbitration is to be regulated by arbitration rules prepared by an international organization. Alternatively, they may agree upon two arbitration institutions, one located in the country of each party, and provide that the arbitration is to be administered by the institution in the country of the party against whom a claim is brought (the so-called mixed arbitration clause). The parties may wish to adopt this approach if they cannot agree upon a single arbitration institution to administer the arbitration. This approach may, however, give rise to some difficulties. The legal rules applied to arbitration in the two countries are likely to differ, and could be more burdensome or otherwise less satisfactory to a party in one country than in the other. In addition, if arbitral proceedings involving disputes arising out of the same works contract are conducted in both countries, the proceedings will be controlled by different courts, and different degrees of control may be exercised (see paragraph 14, above).

(e) Decision ex aequo et bono

26. It is advisable for the parties to be cautious in authorizing the arbitral tribunal to decide disputes ex aequo et bono, since such an authorization may be interpreted in different ways, and in some cases might lead to results which depart from the legal framework agreed upon by the parties in the contract. Under some legal systems an arbitral tribunal is not permitted to decide ex aequo et bono. If the parties do wish to authorize the arbitral tribunal to decide ex aequo et bono, they should also obligate it to decide the dispute in accordance with the terms of the contract and taking into account the usages applicable to the transaction.

2. Disputes to be settled by arbitration

27. The parties should indicate what disputes they wish to have settled by arbitration. An approach often adopted to drafting the arbitration clause is to stipulate that all disputes arising out of or relating to the contract are to be settled by arbitration (see footnote 7, below, paragraph (1)). In some cases the parties may wish to exclude from the wide jurisdiction thus conferred on the arbitrators some disputes they do not wish to be settled by arbitration. Alternatively, in exceptional cases the parties may wish to specify in the arbitration clause the kinds of disputes which are to be settled by arbitration (for example, disputes concerning some of the following issues: determination of the rights and duties of the parties; whether or not the contract has been breached, and if so the consequences of the breach; whether or not the contract or some of its provisions are invalid, and if so the consequences of the invalidity; whether or not performance of the contract is or may be suspended, and if so the consequences of the suspension; whether or not the contract is to be terminated, and if so the consequences of the termination). Under many legal systems an arbitration clause is considered to be an independent agreement which may be valid and remain in force even if the contract in which it was included is invalid or terminated. Under those legal systems therefore the arbitrators have the competence to decide that the contract in which the arbitration clause was included is invalid or terminated without at the same time destroying their authority to arbitrate. The parties may also wish to authorize the arbitrators to settle certain specified disputes concerning a failure of agreement or consent (see section G, "Disputes concerning failure of agreement or consent", below, and illustrative provisions in footnote 7, below, paragraphs (2) and (3)).

- 28. The parties may wish to authorize the arbitral tribunal to order interim measures of protection. Under some legal systems, however, interim measures ordered by an arbitral tribunal cannot be enforced. In such cases it may be preferable for the parties to rely on a court to order interim measures. Under most legal systems a court may order interim measures even if the dispute is to be or has been submitted to arbitration. In cases where the arbitration clause may be interpreted as excluding the power of a court to order interim measures, it is advisable to provide in the contract that the agreement to settle disputes by arbitration does not prevent either of the parties from requesting a court to order interim measures of protection (see footnote 7, below, paragraph (4)(a), (b) and (c)).
- 29. It may be advisable to stipulate in the arbitration clause that the parties are obligated to comply with arbitral decisions, including interim measures. Where an arbitral award is not directly enforceable, a failure to comply with the arbitral decision may be regarded in judicial proceedings as a breach of a contractual obligation.⁷

E. Judicial proceedings

30. If the parties do not agree on the settlement of their disputes by arbitration, disputes between the parties will be decided by the courts which have jurisdiction to decide those disputes. The scope of court jurisdiction is not the same in all countries, and the courts of two or more countries may be competent to decide the same disputes between the parties. A court in principle applies only the rules of private international law of its country, and even

of performance] thereof shall be settled by arbitration in accordance with ... (identify arbitration rules) as at present in force."

"(2) Where the parties fail to reach agreement on adapting or supplementing the contract as required under articles ... of this contract, the arbitral tribunal is entitled to adapt or supplement the contract. The decision of the arbitral tribunal shall be deemed to be an agreement of the parties which is incorporated in the contract from the date specified in the award."

(This paragraph may be included in the arbitration clause if the contract is to be adapted or supplemented, and the law applicable to the arbitration permits the arbitral tribunal to adapt or supplement the contract.)

"(3) If [a party] [the purchaser] wrongfully fails to give his consent as required under articles ... of this contract, the arbitral tribunal is entitled to make a decision which has the effect of a consent given by [the party] [the purchaser]."

(This paragraph may be included in the arbitration clause if the contract requires that the consent of a party (frequently the purchaser) be given in certain situations, and the law applicable to the arbitration permits the arbitral tribunal to make a decision which has the effect of a consent required to be given by a party.)

(4) (a) The arbitral tribunal is entitled during the arbitral proceedings, upon the request of a party made in writing, to order any interim measures of protection

necessary for the establishment or preservation of evidence to be used in arbitral proceedings, or

which are urgently needed to safeguard the rights of a
party, or to prevent or mitigate serious loss which may be
caused to a party by an act or omission to act by the other
party in connection with a dispute in respect of which
arbitral proceedings have been initiated.

"(b) Interim measures ordered by the arbitral tribunal shall cease to have effect when the dispute to which the interim measures relate is settled in arbitral proceedings, unless the order for interim measures specifies that they are to cease to have effect at an earlier time.

"(c) The authority given to the arbitral tribunal under subparagraph (a) of this paragraph to order interim measures does not exclude the right of either party to request a court to order interim measures of protection."

(This paragraph may be included in the arbitration clause if no provision for taking interim measures is contained in the arbitration rules which are to be incorporated by reference under paragraph (1) of this clause.)

"(5) The arbitral tribunal is entitled to review decisions made by the expert under articles ... of this contract and to set aside or modify his decisions in accordance with the provisions of those articles."

(This paragraph may be included in the arbitration clause if an expert is authorized to settle specified disputes in respect of the contract, and the law applicable to the arbitration permits the review. The articles to be enumerated are those conferring powers on the expert in regard to the settlement of disputes: see footnotes 11, 12, 13 and 14, below).

"(6) The parties are obligated to comply with arbitral decisions made by the arbitral tribunal.

- "(7) (a) The number of arbitrators shall be ... (one or three).
 - "(b) The place of arbitration shall be ... (town or country).
 - "(c) The language[s] to be used in the arbitral proceedings shall be
 - "(d) The appointing authority shall be ... (name and address of institution or person)."

(Subparagraph (d) should be included in the arbitration clause if the rules which are to be incorporated by reference under paragraph (1) of this clause are not the rules of an arbitration institution.)

⁷Illustrative provisions (arbitration clause)

[&]quot;(1) Any dispute, controversy or claim arising out of or relating to this contract, or the breach, termination or invalidity [or suspension

the validity and effect of a choice by the parties of the law applicable to the contract is determined by a court by reference to laws identified in accordance with those rules (see chapter XXVIII, "Choice of law"). Accordingly, the legal position of the parties in the event of a dispute depends to some extent upon which court decides the dispute.

- 31. Uncertainty in respect of court jurisdiction is reduced if the parties include an exclusive jurisdiction clause in the contract. Under such a clause, the parties are obligated to submit disputes which arise between them in connection with the contract to a court at a specified place in a specified country (see footnote 8, below, paragraph (1)). An exclusive jurisdiction clause would usually designate a court in the country of one of the parties. However, the courts of other countries are also often designated. The law of many countries gives effect to these clauses in international trade contracts, though under varying conditions (e.g. some laws may require a link between the contract and the country of the selected court). The law of many countries requires an exclusive jurisdiction clause to be in writing.
- 32. If the parties wish the selected court to have exclusive jurisdiction, they should so specify. If they fail to specify exclusivity, the clause may be interpreted as giving the selected court a jurisdiction which is only concurrent with that of other courts which have jurisdiction under the laws determining their jurisdiction.
- 33. The validity and effect of the contemplated exclusive jurisdiction clause should be considered in the light of the law of the country of the selected court, as well as the law of the countries of the two parties. If the clause is valid under the law of the countries of each of the two parties but invalid under the law of the country of the selected court, difficulties may arise in initiating judicial proceedings in any of the countries. If the clause is considered valid under the law of the country of the selected court but invalid under the law of the countries of the two parties, the jurisdiction of the selected court would not be exclusive and its decisions may not be enforceable in the countries of either of the two parties.
- 34. The parties should consider to what extent decisions of the selected court might be enforceable in the countries of the two parties. In this regard, they should take into account any international treaty concluded between the country of the selected court and their own countries which establishes conditions under which decisions of the selected court are enforceable in their countries. In the absence of such a treaty, they should take into account the conditions under which such decisions are enforceable under the laws of their countries. Under many legal systems reciprocity may be a condition for enforceability.
- 35. It is advisable to provide in the exclusive jurisdiction clause that a particular court in the place where the judicial proceedings are to be instituted is to have jurisdiction. If the clause only refers to the courts of a place in the selected country without identifying a par-

ticular court, there may be difficulty in determining which court in that place is to decide the disputes. An exclusive jurisdiction clause is normally valid under the law of the country of the selected court only if the selected court is competent under its jurisdictional laws to decide upon the kind of disputes which that court is intended to decide under the clause. The parties should therefore ascertain that the court contemplated by them has the competence to decide the types of disputes which they wish to submit to it. The clause may specify the disputes to be decided by the selected court in a manner similar to the specification of the disputes under an arbitration clause (see paragraph 27, above).

F. Settlement of disputes by experts

36. The use of an expert may be advisable when disputes of a technical nature require a rapid settlement. It may be possible to commence proceedings before an expert much more quickly than to commence legal proceedings. The procedure to be followed by the expert can be quite informal and expeditious, and it can be structured by the parties so as to suit the kind of disputes to be settled by the expert. Under some legal systems an expert may be competent to create new contractual rights and obligations, or to make decisions which have the effect of a consent required to be given by a party under the contract, while a court or arbitral tribunal may not have that competence.

⁸Illustrative provisions (exclusive jurisdiction clause)

[&]quot;(1) Any dispute, controversy or claim arising out of or relating to this contract, or the breach, termination or invalidity [or suspension of performance] thereof shall be settled exclusively by ... (specify court) at ... (specify town and country).

[&]quot;(2) Where the parties fail to reach agreement on adapting or supplementing the contract as required under articles ... of this contract, the court is entitled to adapt or supplement the contract. The decision of the court shall be deemed to be an agreement of the parties which is incorporated in the contract from the date specified in the decision."

⁽This paragraph may be included in the exclusive jurisdiction clause if the contract is to be adapted or supplemented, and the law applicable to the judicial proceedings permits the court selected by the parties to adapt or supplement a contract when the parties have authorized it to do so.)

[&]quot;(3) If [a party] [the purchaser] wrongfully fails to give his consent as required under articles ... of this contract, the court is entitled to make a decision which has the effect of a consent given by [the party] [the purchaser]."

⁽This paragraph may be included in the exclusive jurisdiction clause if the contract requires that the consent of a party (frequently the purchaser) be given in certain situations, and the law applicable to the judicial proceedings permits the court selected by the parties to make a decision which has the effect of a consent required to be given by a party when the parties have authorized the court to do so.)

[&]quot;(4) Notwithstanding the provisions of paragraph (1) of this clause, a party may request a court other than the court specified in paragraph (1) to order any interim measures of protection.

[&]quot;(5) The court is entitled to review decisions made by the expert under articles ... of this contract and to set aside or modify his decisions in accordance with the provisions of those articles."

⁽This paragraph may be included in the exclusive jurisdiction clause if an expert is authorized to settle specified disputes in respect of the contract, and the law applicable to the judicial proceedings permits the court selected by the parties to review the decisions of the expert when the parties have authorized it to do so. The articles to be enumerated are those conferring powers on the expert in regard to the settlement of disputes: see footnotes 11 12, 13 and 14, below).

- 37. On the other hand, the procedure of dispute settlement by an expert is not regulated under many legal systems, and there are only limited legal safeguards to ensure that the proceedings are conducted carefully and impartially. In addition, the decision of an expert cannot be directly enforced if a party fails to carry it out and legal proceedings must be initiated in which the failure to comply with the expert's decision may be regarded as a breach of a contractual obligation (see paragraph 50, below). It may therefore be preferable to request the expert to act as a sole arbitrator unless there are good reasons why he should not act in that capacity. Such reasons would exist if arbitral proceedings would not be expeditious enough, or if the law applicable to the arbitration does not permit the dispute in question to be settled in arbitral proceedings. The authority given to the expert should be limited in the contract to the settlement of issues which are carefully delineated and whose major content is technical. The authority should not cover purely legal issues, since in many cases the expert will have no legal training, and legal proceedings are more appropriate for the settlement of those issues. It may be advisable to provide for a review of the expert's decision by a court or arbitral tribunal (see paragraphs 47-49, below).
- 38. The procedure of dispute settlement by an expert is not regulated under many legal systems, and must therefore be regulated by contractual provisions. This Guide therefore deals with these issues arising in connection with the settlement of disputes by an expert in some detail.
- 39. In some cases the parties may wish to agree in the contract that certain technical disputes are to be settled by a consulting engineer employed by the purchaser. The selection of a consulting engineer who is to have such authority, and the kinds of dispute which are to be settled by him, are discussed in chapter X, "Consulting engineer".

1. Appointment of expert

40. The parties may decide to designate an expert in the contract (see footnote 9, below, alternative I). This may accelerate the settlement procedure, by making it possible for a party to request the expert to settle a dispute as soon as it has arisen. The other party should be notified of the request. It may be advisable to designate in the contract an alternate expert to settle disputes when the first expert designated is not immediately available. Alternatively, the parties may designate only one expert, but agree with him that he should be immediately available during a specified period for the settlement of disputes. It may be necessary to pay the expert a fee to secure such availability. However, where a complex industrial works is being constructed, different technical disputes may arise which require different specializations for their settlement. Since at the time the contract is concluded it will be impossible to predict the nature of the disputes which might arise, it may not be desirable to designate an expert in the contract, since his specializations would necessarily be limited.

- 41. The expert will be able to settle disputes more expeditiously if he is acquainted with the construction that has been completed, and the current situation on the site. The parties may therefore provide that he is to be kept informed of progress in the construction, and specify the form in which the necessary information is to be given to the expert.
- 42. Instead of designating the expert in the contract, an alternative approach is to provide in the contract for a procedure for the appointment of the expert after a dispute has arisen (see footnote 9, below, alternative II).
- 43. If the parties fail to agree upon an expert within a period of time to be specified in the contract after a notice calling for the designation of an expert has been delivered, the expert may be designated by an institution or person specified in the contract. The parties should make sure that the chosen institution or person is willing and will be available to appoint an expert. The parties may choose an institution which has issued rules expressing its willingness to designate technical experts if so requested by a party or parties to a contract on the basis of a contractual clause.⁹

2. Commencement and cessation of proceedings before expert

- 44. The contract may provide that any party has the right to initiate legal proceedings without being obligated first to propose that a dispute be settled by an expert. If this approach is adopted a party can choose the dispute settlement procedure which he considers to be more appropriate for the dispute in question. An alternative approach may be to provide that legal proceedings cannot be initiated before the expiry of a specified period of time commencing to run from the time that one party proposes to the other party that the dispute be settled by an expert. The period of time specified by the parties should not be long, as otherwise an early settlement of the dispute in legal proceedings may not be possible. Furthermore, the contract should permit either party to initiate legal proceedings before the expiry of the specified period of time if the initiation is needed to prevent the loss of a right, or the expiry of a prescription period.
- 45. In general, the contract may provide that the expert is to cease to act when legal proceedings are inititated in respect of the dispute being settled by him. In certain cases, however, the contract may provide that the expert is to continue to act after legal proceedings are initiated,

⁹Illustrative provisions

Alternative I

[&]quot;The parties designate ... (name, profession and address) as the expert for the settlement of disputes required to be settled by an expert under this contract."

Alternative II

[&]quot;(1) The expert for the settlement of disputes required to be settled by an expert under this contract shall be designated by agreement of the parties.

[&]quot;(2) If the parties fail to agree upon an expert before the expiry of ... days after a party has delivered to the other party a notice calling for the designation of an expert, the expert shall be designated by ... (name and address of institution or person)."

for example in cases where the expert's function is limited to making findings preserving or establishing evidence to be used in the legal proceedings, or to the taking of interim measures. The expert should, however, cease to act when the dispute is settled in the legal proceedings (see footnote 10, below, paragraph (1); footnote 11, below, paragraph (1); footnote 12, below, paragraph (2); footnote 13, below, paragraph (2); and footnote 14, below, paragraph (2)).

3. Mandate of expert

- 46. The expert may be authorized to deal with technical issues which require a rapid settlement, and whose legal content is minimal. For example, he may be authorized to deal with issues concerning the fixing of the time-schedule for construction (see chapter IX, "Construction on site"), the determination of the amount of an instalment of the price to be paid during construction (see chapter VII, "Price"), the validity of the contractor's objections to a variation ordered by the purchaser, the consequences of the variation on the time-schedule and the price (see chapter XXIII, "Variation clauses"), and the results of mechanical completion and performance tests (see chapter XIII, "Completion, take-over and acceptance"). In dealing with such issues, he may make findings of fact, order interim measures, decide on disputes concerning failures of performance, or make decisions when there has been a failure of agreement or consent.
- 47. The expert may be empowered to make findings of fact (see footnote 10, below, paragraph (1)). During the construction process, the condition of the uncompleted works changes rapidly, and partially completed construction is soon covered up by further construction. In the event of a dispute involving the condition of uncompleted works, it is thus important that evidence of the relevant condition of the works is secured as soon as possible, since it may be impossible at a later stage to obtain such evidence. The expert may be authorized upon request of either party to determine the condition of the works and to preserve or establish evidence to be used in possible legal proceedings. The contract may provide that his findings are to be regarded as expert evidence by a court or arbitral tribunal, and evaluated in the same manner as other expert evidence (see footnote 10, below, paragraph (2), alternative I). Another approach may be to provide in the contract that the parties are not permitted to question the correctness of the findings of fact in legal proceedings (see footnote 10, below, paragraph (2), alternative II).¹⁰

¹⁰Illustrative provisions

- 48. Since the need to continue construction without interruption may sometimes require urgent interim measures to be taken in respect of a dispute between the parties before the dispute is settled in legal proceedings, the expert may be empowered to decide on the taking of interim measures in respect of specified kinds of disputes. For example, where the amount due to a contractor for a completed portion of the works is in dispute during the construction, an interim decision that some amount must be paid to the contractor for completed work may be needed in order to enable him to have the funds to proceed with the construction. The parties may wish to authorize the expert to take such interim measures. ¹¹
- 49. Disputes concerning failures of performance by a party often involve significant legal issues, and should normally be settled in legal proceedings. However, the expert may be authorized to decide on specified disputes concerning failures of performance (e.g. whether construction is defective, and the purchaser is entitled to order stoppage of the construction).¹² He may also be

11Illustrative provisions

- "(1) Upon the request of a party made in writing, the expert is authorized before the commencement of [and during] [arbitral] [judicial] proceedings to order interim measures concerning ... (specify the matters concerning which interim measures may be ordered).
- "(2) (a) The parties must comply with interim measures ordered by the expert under this clause unless the interim measures are outside the terms of reference given to the expert by the parties, or set aside or modified in accordance with subparagraphs (b) and (c) of this paragraph.

(b) The interim measures may be reviewed in [arbitral] [judicial] proceedings, provided a party initiates those proceedings within ... days (specify period of time) after the decision on the interim measures.

"(c) At a review, the [arbitral tribunal] [court] may modify or set aside the interim measures [but only if it decides that the expert has violated the applicable law or a contractual provision]."

¹²Illustrative provisions

"(1) Upon the request of a party made in writing, the expert is authorized to settle disputes concerning (specify the disputes of a technical nature concerning failures of performance which the expert may settle).

Alternative I

- "(2) (a) Either party is entitled to initiate [arbitral] [judicial] proceedings in respect of a dispute irrespective of whether or not the settlement of the dispute by an expert is proposed or has commenced.
 - "(b) The expert shall [cease to act in the settlement of any dispute when [arbitral] [judicial] proceedings are initiated in respect of that dispute] [continue to act in the settlement of any dispute after [arbitral] [judicial] proceedings are initiated in respect of that dispute. The expert shall, however, cease to act in the settlement of the dispute when the dispute is settled in those proceedings].

Alternative II

"(2) (a) Neither party is entitled to initiate [arbitral] [judicial] proceedings relating to any dispute which the expert is authorized to settle before the expiry of ... days (specify a period of time) from the time when one party informs the other that he wishes that dispute to be settled by the expert. "(b) Either party is however entitled to initiate [arbitral] [judicial] proceedings before the expiry of the period of time

[judicial] proceedings before the expiry of the period of time specified in subparagraph (a) of this paragraph if the initiation of the proceedings is needed to prevent the loss of a right or the expiry of a limitation period.

"(c) The expert shall cease to act in the settlement of any dispute when [arbitral] [judicial] proceedings are initiated in respect of that dispute.

[&]quot;(1) Upon the request of a party made in writing, the expert is authorized before the commencement of [and during] [arbitral] [judicial] proceedings to make findings of fact concerning (specify scope of fact-finding by the expert).

Alternative I

[&]quot;(2) Findings of fact made by the expert and submitted to the [arbitral tribunal] [court] must be evaluated by the [arbitral tribunal] [court] as expert evidence.

Alternative II

"(2) The parties are not permitted to question in legal proceedings the correctness of findings of fact made by the expert."

empowered to decide on the adaptation or supplementation of the contract, 13 or to make a decision which has the effect of a consent required to be given by a party, 14 if the decision in either case involves the consideration of technical issues (see section G, "Disputes concerning failure of agreement or consent", below). The parties should consider whether a court or arbitral tribunal is entitled under the laws governing their proceedings to review decisions of an expert of the kind referred to in this paragraph. Under some legal systems a court or arbitral tribunal is entitled to make a review. Under other legal systems a court or arbitral tribunal is entitled to make a review if it is so authorized by the parties. Some legal systems which admit a review without authorization permit the parties to exclude it. Excluding or not authorizing a review has the advantage that a final decision on the dispute is reached rapidly. Permitting a review gives the parties greater assurance that they will obtain a fair and just decision. The advantages of both approaches may to some extent be combined by stipulating in the contract that the expert's decision is binding on the parties and cannot be reviewed in legal proceedings, unless a party initiates the proceedings within a short specified period of time after the expert's decision is delivered to him (see footnote 12, above, paragraph (3)(b).

"(3) (a) The parties must comply with the decision of the expert unless the decision is outside the terms of reference given to the expert by the parties, or set aside or modified in accordance with subparagraphs (b) and (c) of this paragraph. "(b) The decision may be reviewed in [arbitral] [judicial] proceedings, provided a party initiates those proceedings within ... days (specify period of time) after the decision of the expert has been delivered to him.

"(c) At a review, the [arbitral tribunal] [court] may modify or set aside the decision."

¹³Illustrative provisions

"(1) Upon the request of a party made in writing, the expert is authorized to settle disputes concerning the [adaptation] [supplementation] of the contract if the parties fail to reach agreement under articles ... (specify articles) of this contract."

(Paragraph (2) of this provision is identical with paragraph (2) set forth in footnote 12.)

"(3) (a) The decision of the expert shall have the effect of an agreement of the parties incorporated in this contract from the date specified in the decision, unless the decision is outside the terms of reference given to the expert by the parties or set aside or modified in accordance with subparagraphs (b) and (c) of this paragraph. If a party fails to comply with the decision, the other party may in [arbitral] [judicial] proceedings claim performance of the obligations imposed by the decision."

(Subparagraphs (b) and (c) of this provision are identical with paragraph (3)(b),(c), set forth in footnote 12.)

¹⁴Illustrative provisions

"(1) Upon the request of a party, the expert is authorized to settle disputes relating to the failure of [a party] [the purchaser] to give a consent required to be given under articles ... (specify articles) of this contract."

(Paragraph (2) of this provision is identical with paragraph (2) set forth in footnote 12.)

(3) (a) The decision of the expert shall have the effect of the consent of a party required under the articles of this contract enumerated in paragraph (1), above, unless the decision is outside the terms of reference given to the expert by the parties or set aside or modified in accordance with subparagraphs (b) and (c) of this paragraph."

(Subparagraphs (b) and (c) of this provision are identical with paragraph (3)(b),(c), set forth in footnote 12.)

50. Under many legal systems an expert's decision cannot be directly enforced if a party fails to perform it, since it does not have the status of an arbitral award or judicial decision. The parties should therefore be obligated under the contract to comply with the decisions of the expert.

G. Disputes concerning failure of agreement or consent

- At the time of the conclusion of the contract the parties may not have sufficient information to agree how certain issues are to be resolved (e.g. to fix the timeschedule for the entire construction) and they may therefore in the contract provide that those issues are to be resolved at a later stage. Furthermore, during the performance of the contract a change of circumstances may occur which under the contract requires the parties to renegotiate the contract and adapt it to the new circumstances. In such cases the parties may at a later stage fail to agree how the postponed issues are to be resolved, or whether a change of circumstances requiring the adaptation of the contract has occurred and, if so, how the contract should be adapted. In addition, disputes may arise concerning the failure of a party to give a consent which he is required to give under the contract (e.g. for the employment of a subcontractor). The resolution of such disputes requires decisions creating new contractual rights and obligations, or the making of a decision by a third party which has the effect of a consent required to be given by a party to the contract. Such decisions are distinct from the adjudication of disputes relating to existing rights and obligations, and the consequences of a failure to perform an obligation (e.g. liability to pay damages).
- 52. Whether a court or arbitral tribunal is entitled to create new contractual rights and obligations, or to make a decision which takes the place of a consent required to be given under the contract by a party, depends on its competence under the law applicable to the legal proceedings. Under some legal systems, a court is not entitled to exercise such powers, and arbitrators are entitled to exercise only the powers which a court may exercise. Under other legal systems a court or arbitral tribunal is entitled to exercise such powers if the parties by agreement have expressly conferred such powers on them. Under many legal systems an expert is entitled to create new contractual rights and obligations or to make a decision which has the effect of the consent of a party, if he is authorized under the contract to do so.
- 53. Where the applicable law permits a court, an arbitral tribunal or an expert to create new contractual rights and obligations or to make a decision which has the effect of the consent of a party, it is advisable for the clause in the contract on the settlement of disputes expressly to authorize the arbitral tribunal, court or expert to exercise those powers (see footnote 7, above, paragraphs (2) and (3); footnote 8, above, paragraphs (2) and (3); footnote 13, above, paragraph (1); and footnote

- 14, above, paragraph (1)). In the absence of an express authorization, the clause may be interpreted as only conferring authority to adjudicate on disputes relating to existing rights and obligations and the consequences of a failure to perform an obligation. In addition, the parties should identify the disputes to be settled under the authority conferred by them, if possible by reference to contractual provisions calling for supplementation or adaptation of the contract or requiring the consent of a party (see footnote 13, above, paragraph (1), and footnote 14, above, paragraph (1)).
- 54. The clause on the settlement of disputes should determine the legal consequences of decisions in the types of disputes dealt with in this section. If the creation of new contractual rights and obligations is contemplated, the clause should provide that the decision is binding on the parties in the same manner as contractual terms agreed to by the parties. In contrast to a decision in a dispute concerning a failure to perform an obligation, a binding decision creating new contractual rights and obligations may not be directly enforceable. If, however, a party fails to perform an obligation created by the decision, it may be possible to initiate legal proceedings in which failure to comply with the decision may be regarded as a breach of a contractual obligation.
- 55. In many legal systems there is an absence of substantive rules determining the criteria which should be taken into consideration by a court or arbitral tribunal in deciding disputes concerning the creation of new contractual rights and obligations, or the making of a decision which has the effect of the consent of a party. As a result, such decisions may be given merely on a fair and discretionary assessment of all relevant circumstances.
- 56. In order to reduce the possible uncertainty connected with such decisions, the parties may wish to indicate in the contract the criteria to be taken into consideration in reaching a decision. Since different criteria may be relevant depending on the content of a particular contractual provision, it may be preferable to specify those criteria which are relevant to a particular contractual provision in that particular provision (e.g. see chapter XXIII, "Variation clauses").
- 57. The difficulties mentioned above which arise in connection with the adaptation of contractual rights and obligations by a court, an arbitral tribunal or an expert may be reduced if a mechanism is provided in the contract under which contractual terms are to be automatically modified by the application of a formula specified in the contract without the need for further agreement by the parties. Such an approach is practicable particularly in connection with the adjustment or revision of the price. The contractual mechanism may be based on a specified mathematical formula. Alternatively, the contract may provide for the payment of costs reasonably incurred by a party (see chapter VII, "Price"). Where such an approach is used by the parties, there will be no disputes involving failure of agreement, and potential disputes will relate only to the effect of the contractual provisions.

H. Multi-party settlement of disputes

- The construction of industrial works often involves the participation of a number of different entities, each under his own contract with the contractor or the purchaser. These may include, for example, contractors under separate works contracts with the purchaser, engineers, subcontractors and suppliers of equipment and materials. A problem arising in connection with the construction of the works may involve several of these entities. For example, one contractor may claim damages against the purchaser because the contractor was prevented from commencing construction on the date fixed for commencement in his contract with the purchaser. He may have been prevented from doing so due to a failure by another contractor engaged by the purchaser to complete a portion of the construction. The first contractor would have a claim against the purchaser and the purchaser would have a claim against the second contractor. It may be more efficient and satisfactory for the rights and obligations of all entities involved in a dispute or related disputes to be resolved in the same proceedings, with all of these entities participating, rather than in separate proceedings. In addition, the joinder of several contractors in a single proceeding would be advantageous to the purchaser when it is unclear which of the contractors is responsible for defects in the works. Proceedings involving more than two entities are referred to in this Guide as "multi-party proceedings". Multi-party proceedings would avoid inconsistent decisions being given due, for example, to the application of different procedural rules or different evaluations of the same evidence in separate proceedings. They could also facilitate the taking of evidence, and expedite and reduce the costs of the settlement of disputes.
- 59. Many States have laws which provide for and regulate multi-party proceedings in their courts. In some States entities may be compelled under certain circumstances to participate in multi-party judicial proceedings, and under other circumstances entities are permitted to intervene in proceedings between other entities, even without the prior agreement of the entities concerned. In other countries multi-party judicial proceedings are permitted only if the entities concerned agree to such proceedings. Where the law of the selected court where judicial proceedings are to be brought (see section E, "Judicial proceedings, entities who have agreed to the jurisdiction of the court may wish to include provisions in their contracts which enable those proceedings to be brought.
- 60. The conduct of multi-party arbitral proceedings is more difficult. The law of most States does not provide for or otherwise deal with such proceedings. The conduct of multi-party arbitral proceedings therefore depends entirely upon the agreement of the entities participating in the proceedings. Thus, an entity usually cannot be compelled to participate in proceedings involving other entities nor can an entity intervene in proceedings between other entities, without the agreement of those entities.

- 61. Notwithstanding the absence of a legal framework for the structuring of multi-party arbitral proceedings, the parties may wish to endeavour to provide for such proceedings by agreement. 15 The agreement to participate in multi-party arbitral proceedings may be expressed in ways similar to its reflection in agreements to participate in traditional two-party arbitral proceedings (see paragraph 13, above). The entities may enter into a multiparty arbitration agreement after a dispute arises, or they may do so when they enter into their contracts for or in connection with the construction of the works. In the latter case the agreement may be in the form of harmonized arbitration clauses in the different contracts, or a single separate arbitration agreement to which all entities become parties contemporaneously with entering into their contracts. For reasons noted in paragraph 13, above, it would be preferable for the agreement of the entities to participate in multi-party arbitral proceedings to be expressed when they enter into their contracts, rather than attempting to conclude a multi-party arbitration agreement after a dispute actually arises.
- 62. Much of the difficulty in providing for multi-party arbitral proceedings derives from the necessity, at a time when the nature and scope of possible disputes between them is not known, for the numerous participants in the construction of the works to agree to procedures that are consistent. To ensure this consistency, it may be preferable for all entities to become parties to a single separate arbitration agreement, rather than to attempt to provide for multi-party proceedings through arbitration clauses in individual contracts. The following are examples of issues which should be addressed in a multi-party arbitration clause or agreement.
- 63. The arbitration clauses or separate arbitration agreement should provide a mechanism whereby arbitral proceedings involving all entities concerned in a dispute or related disputes are conducted before the same arbitral tribunal. In some cases it may be possible for all envisaged participants in multi-party proceedings arising from the construction of the works to agree to the same arbitrator or arbitrators. However, it may be difficult to achieve such agreement on the part of the various participants at the time of entering into a separate arbitration agreement or a contract containing an arbitration clause. Therefore, it may be preferable for all of the entities in their arbitration clauses or in the separate

- arbitration agreement to agree to the same appointing authority, and to authorize the appointing authority to decide upon the number of arbitrators to resolve a particular dispute and to appoint all arbitrators.
- 64. The arbitration clauses or separate arbitration agreement should define the scope of the multi-party proceedings, both as to the entities who may participate in particular proceedings as well as to what may be the subject-matter of the proceedings. With respect to the participants in the proceedings, the arbitration clauses or agreement should specify the criteria by which particular entities may be compelled, if at all, to participate in multiparty proceedings, and by which entities are entitled to intervene in proceedings between other entities. With respect to the subject-matter of multi-party proceedings, the arbitration clauses or agreement should specify the criteria by which related two-party proceedings may be consolidated into a single multi-party proceeding. They may also delimit the types of disputes which may be resolved in multi-party proceedings (see paragraph 27, above).
- 65. The parties should give careful consideration to the choice of rules which are to govern the multi-party arbitral proceedings (see paragraphs 15 to 18, above). Since existing established arbitration rules are designed to deal with two-party arbitral proceedings, the parties should examine the provisions of the rules to determine whether they are appropriate for multi-party proceedings, and should make necessary modifications to the rules, if possible.
- 66. Without a legal framework for multi-party proceedings or adequate models to follow, it may be difficult to structure a satisfactory arrangement for proceedings of that nature by agreement. If it is found not to be possible to do so, the parties may wish to attempt in other ways to reduce the possibility of inconsistencies in decisions in two-party arbitrations involving related disputes. They might, for example, require all relevant entities in their individual contracts to designate the same appointing authority for arbitral proceedings arising from those contracts. That authority would then be able to appoint the same arbitrators for related disputes. The entities might also provide in their individual contracts for cooperation among them by, for example, making evidence or information in the hands of one entity available to another entity when relevant to a dispute by the other entity with a third entity.

[A/CN.9/WG.V/WP.17/Add.7]

Chapter II. Choice of contracting approach

Summary

A purchaser who intends to contract for the construction of industrial works has a choice between entering into a single contract with a single contractor who would be responsible for all performances needed for the

¹⁵This Guide does not attempt to deal in detail with the issues which might be addressed by the parties. It is only recently that attention has been devoted by practitioners and scholars to issues and problems in connection with multi-party arbitral proceedings. More analytical work in this field will have to be done before detailed recommendations of general applicability can be made in a guide such as this one. The establishment within national legal systems of a legal framework for multi-party arbitral proceedings, and the creation of a set of arbitration rules which take into account the particular features of multi-party proceedings (see paragraph 65, below), would greatly facilitate the creation by parties of arrangements for multi-party proceedings and the conduct of multi-party proceedings. For the present, bearing in mind the advantages of multi-party proceedings described above, and the advantages of arbitral over judicial proceedings, readers of this Guide are recommended to consider in the context of their own contracts possible solutions to issues such as those mentioned in this section.

completion of the works, or dividing the performances needed among several entities (paragraph 1). Which technique he adopts may depend on several factors (e.g. whether the technology to be used in the works is the exclusive property of a single supplier, whether the purchaser has the capability to co-ordinate the performances of several entities, or whether mandatory legal regulations in the country of the purchaser require local enterprises to be engaged for certain aspects of the construction). Within these techniques, there are different possible approaches to contracting, and a particular terminology has been adopted in the Guide to describe these approaches (paragraphs 2 and 3).

The contractual approach whereby a single contractor is engaged to render all performances needed for the completion of the entire works is referred to as the "turnkey contract approach". The turnkey contractor is liable for any delay in construction or defects in the works (paragraph 4). Where offers are solicited from potential turnkey contractors, each offer will be based on an individual design, and the purchaser will be able to choose the design which is most responsive to his requirements, though in some cases comparison of the different designs may be difficult (paragraph 5). A turnkey contractor may sometimes be motivated more by a desire to offer an attractive price than by the need to ensure the durability, reliability and ease of maintenance of the works. On the other hand he usually has no incentive to over-design the works (paragraph 6).

In some cases a single contractor, in addition to assuming the obligations of a turnkey contractor, may undertake to ensure that after the works is completed, it can be operated and agreed production targets achieved by the purchaser's own staff, using raw materials and other inputs specified in the contract. This approach is referred to as the "product-in-hand contract approach" (paragraph 7).

Since a single contractor bears a high degree of risk in effecting all the performances needed for the completion of the works, and must incur costs to guard against this risk, the total cost of the works may be lower if several contractors are engaged than if a single contractor is engaged (paragraph 8).

If the purchaser engages more than one entity to effect the performances needed for the completion of the works, each entity will be responsible only for the performance of the obligations specified in his contract. If the works is defective, it may be difficult for the purchaser to discover which party is liable for the defects. The purchaser has a choice of several approaches when he contracts with several entities (paragraphs 9 and 10).

The purchaser may engage one contractor for the transfer of the technology, the supply of the design and the construction of a vital portion of the works, and also obligate this contractor to define the scope and quality of the construction to be effected by the other entities. This approach is referred to as the "semi-turnkey contract approach". The semi-turnkey contractor may be respon-

sible for handing over to the contractor at an agreed time complete works which is capable of operation as required by the contract, unless he is prevented from doing so by the failure of performance of another entity (paragraphs 11 and 12).

Another approach is to engage one or more entities other than the contractor to transfer the technology and supply the design of the works, and to conclude a works contract with a single contractor for the construction of the entire works in accordance with the design. This approach is referred to as the "comprehensive contract approach". The contractor must co-ordinate the construction process in the same way as a turnkey contractor, but is not liable for defects in the technology or design (paragraph 13).

A further approach available to the purchaser is to divide the construction of the works among two or more separate contractors, the transfer of technology and the supply of the design being also effected by one or more of these contractors, or by other entities. This approach is referred to as the "separate contracts approach". Under this approach the purchaser must co-ordinate the scope and the time of the performances under each separate contract so as to achieve his construction targets (paragraphs 14 and 15). The way in which the construction is to be apportioned among the various contractors will depend upon the nature and size of the works (paragraph 16).

The risks borne by the purchaser in connection with the co-ordination of the separate contracts would be considerably reduced by employing a consulting engineer to advise the purchaser on how to achieve a proper co-ordination. Alternatively, the purchaser may engage a construction manager with a wider scope of responsibility. Another technique is to have one of the separate contractors assume responsibility for some part of the co-ordination (paragraphs 17 and 18).

The separate contracts approach will facilitate the use by a purchaser of local contractors to construct portions of the works. This approach may also enable the purchaser to retain a certain degree of control over the construction (paragraph 19).

As an alternative to settling upon the entire design before the contractors are engaged, the purchaser may wish to consider the use of a method sometimes referred to as "fast track" contracting (paragraph 20).

A. General remarks

1. A purchaser who intends to contract for the construction of industrial works has a choice between entering into a single contract with a single contractor, who would be responsible for all performances needed for the completion of the works, e.g. the transfer of the technology to be used in the works, the supply of the design, and the construction of the works (see section B, "Engagement of single contractor", below), or dividing the performances needed among several entities, concluding an individual contract with each entity (see section C, "Engagement of more than one entity", below). Within these techniques there are different possible approaches to contracting, as discussed below. These approaches differ in important respects, for example, as to the extent of the responsibility of the contractor, the extent to which the purchaser must co-ordinate construction, and in many cases the total cost to the purchaser.

- 2. Whether the purchaser contracts with a single contractor or several entities for the construction of the works may depend upon the nature of the technology to be used in the works. Where the technology is highly specialized or is the exclusive property of a single supplier, the entire works may have to be designed and constructed by the supplier of the technology. In other cases it may be possible for the purchaser to enter into separate contracts for, e.g., the transfer of the technology, the supply of the design, and the construction. Other factors may be relevant to the choice of a contracting approach. For example, if several entities are engaged for the construction, the burden of co-ordinating the performances of the various entities rests on the purchaser, and he must have appropriate capabilities (see paragraph 15, below). Mandatory legal regulations in the country of the purchaser may require that local enterprises be engaged for certain aspects of the construction (e.g. civil engineering) in order to develop the technological capability of the country and to conserve foreign exchange. The extent of the contractor's liability to taxation may influence the contracting approach to be chosen by the parties. The parties may wish to obtain expert advice on the issue of taxation.
- 3. At present there is no uniformly accepted terminology to describe the various contractual approaches to the construction of works. However, in order to facilitate the discussion in the Guide of issues arising in connection with the different contracting approaches, a particular terminology has been adopted in this chapter. The terminology adopted reflects the terminology often used in practice.

B. Engagement of single contractor

1. Turnkey contract approach

4. The contractual approach whereby a single contractor is engaged to render all performances needed for the completion of the entire works, i.e. the transfer of the technology, the supply of the design, the supply of equipment and materials, the erection of the equipment and the performance of the other construction obligations (such as civil engineering and building) is referred to in the Guide as the "turnkey contract approach". Under this

approach the single contractor must co-ordinate the construction process, and is liable for any delay in construction or defects in the works.

- 5. Where the purchaser chooses the turnkey contract approach, and decides to solicit competitive offers from potential contractors (see chapter III, "Procedure for concluding contract"), each offer made by a potential turnkey contractor will be based on his individual design. The purchaser will thus be able to choose the design which is most responsive to his requirements. In addition. since the turnkey contractor is himself to manufacture equipment and effect construction pursuant to the design supplied by him, the design may reflect manufacturing and construction economies and techniques available to the contractor, and thus result in construction which is economical and efficient. On the other hand, it may sometimes be difficult for the purchaser to evaluate and compare the different designs and different combinations of construction elements and methods contained in offers by different potential turnkey contractors.
- 6. In taking his decisions on design, construction methods and selection of sub-contractors, a turnkey contractor having responsibility for all aspects of the construction may sometimes be motivated more by a desire to offer an attractive price than by the need to ensure the durability, reliability and ease of maintenance of the works. On the other hand, a turnkey contractor usually has no incentive to over-design the works (i.e. to include in the design unnecessary features and technical safeguards to ensure that the works perform as required by the contract). Over-designing would make a turnkey contractor's offer uncompetitive. If the design is supplied by a separate designer, there may exist some incentive to over-design.

2. Product-in-hand contract approach

7. In some cases a single contractor, in addition to assuming the obligations mentioned in paragraph 4, above, may undertake to ensure that after the works is completed, it can be operated and agreed production targets achieved by the purchaser's own staff, using raw materials and other inputs specified in the contract. This approach is referred to in the Guide as the "product-inhand contract approach". It may be used by the purchaser as a means of making the contractor responsible, not only for the completion of the entire works, but also for an effective transfer to the purchaser's personnel of the technical and managerial skills and knowledge required by the purchaser's personnel for the successful operation of the works. In contrast to the case where the contractor merely undertakes to train the purchaser's personnel in the operation of the works (see chapter VI, "Transfer of technology"), this approach requires the contractor to ensure that his training is successful. The contract should specify the results which the contractor is obligated to achieve through his training. The contract may provide that the training must enable the purchaser's personnel during the agreed test period to operate the works under the guidance of the contractor's managerial personnel. However, the contractor's responsibility would be greater if the contract provided that the training must enable the purchaser's personnel to operate and manage the works independently. This contracting approach should be distinguished from cases where the contractor undertakes in the contract to assist with his own personnel in the operation of the works after its completion (see chapter XXVI, "Supplies of spare parts and services after construction").

3. Risk and price

8. A single contractor bears a high degree of risk in effecting all the performances needed for the completion of the works. He may insure against this risk, or provide some financial reserves to cover the risk. The cost of adopting these measures is usually reflected in the calculation of the price. If, therefore, the purchaser has the capability effectively to co-ordinate the construction process, the total cost of the works may be lower if several contractors are engaged than if a single contractor is engaged. Since under the product-in-hand contract approach the contractor not only assumes extensive training obligations but also bears the risk of failing to reach the agreed training results, the price charged by him under that approach is likely to be higher than under the turnkey contract approach.

C. Engagement of more than one entity

- 9. An alternative to engaging a single contractor is to divide all the performances needed for the completion of the works among two or more entities. The purchaser may engage one or more entities other than the contractor to transfer the technology and to supply the design for the entire works and one or more contractors to construct the works. In contrast to the case where a single contractor is engaged, none of the entities will be totally responsible for the appropriate operation of the works; each entity will be responsible only for the performance of the obligations specified in its contract. If the works is defective it may be difficult for the purchaser to discover which party is liable for the defects.
- 10. The purchaser has a choice of several contracting approaches when he contracts with several entities for the completion of the works. The approach chosen will affect the extent of the risk to be borne by him.

1. Semi-turnkey contract approach

11. In some cases the purchaser may reduce the risks connected with engaging more than one entity (see paragraph 15, below) by engaging one contractor for the

transfer of the technology, the supply of the design for the entire works and the construction of a vital portion of the works. This contractor may be obligated to provide to the purchaser at the time of the conclusion of the contract or within a specified period of time thereafter specifications defining the scope and quality of the construction to be effected by other entities under individual contracts with the purchaser, and the time-schedule for the construction by the other entities. This approach is referred to in the Guide as the "semi-turnkey contract approach".

12. The semi-turnkey contractor may be responsible under the contract for handing over to the purchaser at an agreed time completed works which are capable of operation as required by the contract, unless he is prevented from doing so by the failure of another entity to perform his construction obligations in accordance with the design, specifications or time-schedule provided by the semi-turnkey contractor to the purchaser. An advantage of the semi-turnkey contract approach for the purchaser is that the responsibility for the transfer of the technology, the supply of the design and the construction of a vital portion of the works is concentrated in one contractor.

2. Comprehensive contract approach

13. Another approach available to the purchaser is to engage one or more entities other than the contractor to transfer the technology and supply the design for the works, and to conclude a works contract with a single contractor for the construction of the entire works in accordance with the design. The design is usually obtained by the purchaser before the tendering procedure or negotiations in respect of the works contract commence, in order that offers to construct may be solicited on the basis of the design. This contracting approach is referred to in the Guide as the "comprehensive contract approach". Since the contractor under this approach is responsible for the construction of the entire works, he must co-ordinate the construction process in the same way as a turnkey contractor. He will not, however, be liable for defects in the technology or design. Under this approach the purchaser does not have a choice among several designs. On the other hand he can more easily compare the offers to contract of the various potential contractors (see paragraph 5, above).

3. Separate contracts approach

- 14. A further approach available to the purchaser is to divide the construction of the works among two or more separate contractors. The transfer of technology and the supply of the design may also be effected by one or more of these contractors, or may be effected by other entities. This approach is referred to in the Guide as the "separate contracts approach".
- 15. Under the separate contracts approach the purchaser must co-ordinate the scope and the time of the performances under each separate contract so as to

achieve his construction targets. The purchaser will bear the risk of delay in construction or defects in the works resulting from his failure to determine appropriately in each contract the equipment, materials and construction services to be supplied by each separate contractor, and the time-schedules to be observed by them. Moreover, if a failure to perform by one contractor has repercussions on the work of the others, the purchaser may be liable to compensate the others for losses suffered by them, provided that they have performed or were ready to perform their contractual obligations. In respect of such compensation paid by him, the purchaser may be entitled to liquidated damages or penalties or to indemnification from the contractor who is liable for the failure. However, the possibility of recourse by the purchaser against the contractor who failed to perform to recover the compensation paid by the purchaser to another contractor may be limited by the contract or the applicable law. As a result, the purchaser may have to bear some portion of the loss caused to him by the contractor who failed to perform.

- 16. Under the separate contracts approach, the supply and erection of equipment and the supply of materials in respect of a portion of or the entire works is often effected under one contract, and building and civil engineering under another one. The erection of equipment may in some cases be effected by the purchaser's personnel or by a local enterprise under the supervision of the contractor (see chapter IX, "Construction on site"). However, the way in which the construction is to be apportioned among the various contractors will depend upon the nature and the size of the works. In general, the less complex is the works, the fewer the number of contractors required, and the easier it will be for the purchaser to co-ordinate the scope and the time of the performances under the separate contracts. The risks connected with co-ordination increase when a large number of parties participate in the construction.
- 17. The risks borne by the purchaser in connection with the co-ordination of the scope and the time of the performances of separate contracts would be considerably reduced by employing a consulting engineer (see chapter X, "Consulting engineer") to advise the purchaser as to how to achieve a proper co-ordination. Alternatively, the purchaser may engage a construction manager (sometimes called managing contractor) with a wider scope of responsibility. The construction manager may be the designer of the works, or an expert with management capabilities. The responsibility of the construction manager need not be limited to giving advice, but may include integrated construction management (e.g. inviting tenders or negotiating and concluding separate contracts for the various portions of the works for and on behalf of the purchaser, co-ordinating all site activities and control of the construction process). If the construction manager is not the designer, he may be obligated to check the design and to assume responsibility for design defects which he could reasonably have discovered. He may also be obligated to advise the purchaser on the selection of contractors. The fee paid for the services of a construction

manager is usually higher than the fee of a consulting engineer because of the wider scope of the construction manager's responsibility. The parties may agree that the fee is to be reduced according to a specified formula if the works is completed late or if the cost of the construction is higher than a target cost, and increased if the works is completed early or the cost is less than the target cost (see chapter VII, "Price").

- 18. Another technique which the purchaser might wish to adopt in order to reduce his risks in co-ordination is to have one of the separate contractors assume responsibility for some part of the co-ordination. This contractor may, for example, be obligated to define the scope of the work to be effected by other contractors engaged by the purchaser, and to provide a time-schedule for that work. He may also be obligated to check the construction effected by the other contractors and to notify the purchaser of defects in the construction which he could reasonably have discovered.
- 19. In addition to making possible the obtaining of a lower price (see paragraph 8, above), the separate contracts approach will facilitate the use by purchasers from developing countries of local contractors to construct portions of the works, perhaps under the supervision of an experienced foreign contractor. This may save foreign exchange and facilitate the transfer of technical and managerial skills to enterprises in the purchaser's country. It may also enable the purchaser to retain a certain degree of control over the construction and the entities involved in it.

4. "Fast track" contracting

20. As an alternative to settling upon the entire design before the contractors are engaged (as for example, under the comprehensive contract approach), the purchaser may wish to consider the use of a method sometimes referred to as "fast track" contracting. Under this approach the design is separately prepared for the various phases of the construction. After the design for a particular phase of the construction has been prepared, the purchaser invites contractors to tender or to enter into negotiations on the basis of this design. A design for the following phase is then prepared followed again by invitations to tender or negotiations. This method may reduce the total period of time needed for the completion of the construction. It may be used even if a single contractor is to complete the entire works. In such a case, several separate contracts, each for the completion of an individual phase, would be concluded with him. The "fast-track" method requires the purchaser to have the project carefully planned before commencing to conclude contracts. In addition, the purchaser may have difficulty in co-ordinating the construction through its several phases. The purchaser will have to make very rapid design decisions; and a high degree of co-operation between the designer and the contractor will be needed.

[A/CN.9/WG.V/WP.17/Add.8]

Chapter VI. Transfer of technology

Summary

The purchaser will require a knowledge of the technological processes necessary for production by the works, and require the technical information and skills necessary for its operation and maintenance. The communication to the purchaser of this knowledge, information and skills is often referred to as the transfer of technology (paragraph 1).

Differing contractual arrangements can be adopted for the transfer of technology and the performance of the other obligations necessary to construct the works (paragraph 2). The transfer of technology itself may occur in different ways. It may occur, for example, through the licensing of industrial property (paragraph 3) or the communication of confidential know-how (paragraph 4). The information and skills necessary for the operation and maintenance of the works may be communicated through documents, or through the training of the purchaser's personnel (paragraph 5).

This Guide does not attempt to deal comprehensively with the licensing of industrial property or the communication of know-how, and the present chapter merely notes certain issues which the parties should address when a works contract involves industrial property or know-how (paragraph 6). In drafting contract provisions relating to the transfer of technology, the parties should take account of mandatory legislation regulating such transfer which may be in force in the purchaser's and contractor's countries (paragraph 7).

Some issues which the parties should address are common both to licensing and know-how provisions, e.g. the description of the technology transferred, and conditions restricting the purchaser in the use of that technology. The extent to which the technology should be described may depend on the contractual arrangements which are adopted (paragraph 8). When deciding whether restrictions are to be imposed on the purchaser's use of the technology, the parties should take into account mandatory legislation which may regulate such restrictions and should attempt to negotiate provisions which are balanced and which impose only restrictions necessary to protect the legitimate interests of each party (paragraph 9). These considerations should apply, for example, to the following types of provisions which the contractor might seek to include: that the purchaser is obligated to purchase from him, or from sources designated by him, some of the materials needed for production by the works (paragraph 10); that the purchaser is prevented from adapting the technology or from introducing innovations to it (paragraph 11); that the purchaser is obligated to communicate to the contractor any improvements to the technology made by the purchaser in the course of using it (paragraph 12); that the purchaser is restricted from exporting products manufactured by the use of the technology to specified countries (paragraph 13).

The guarantees to be given by the contractor may depend on the contractual arrangements adopted, and may range from an unqualified guarantee that the works will operate in accordance with specified parameters, to a qualified guarantee that the works will operate in accordance with specified parameters provided certain conditions are satisfied (paragraphs 14 and 15).

The parties may wish to include in the contract an undertaking by the contractor that the use of the technology transferred will not result in claims by a third party whose industrial property rights may be infringed by the use (paragraph 16). They may wish to specify the procedure to be followed by them in the event of a claim by a third party that his industrial property rights have been infringed, and to determine their rights and obligations during the pendency of the legal proceedings, and in the event that the claim succeeds (paragraph 17).

An issue special to know-how provisions is confidentiality. The contractor will wish to obligate the purchaser to maintain confidentiality in respect of the know-how communicated. The extent to which confidentiality is imposed should be clearly defined in the contract. Furthermore, the contract should provide for situations in which the purchaser may reasonably need to disclose the know-how to third parties (paragraphs 18 and 19).

When technical information and skills are conveyed through documents, the contract may address several issues in regard to the documents. Such issues include the description of the documents to be supplied, demonstrations needed to explain the documents, and the times at which the documents are to be supplied (paragraphs 20 to 22).

A significant method of conveying technical information and skills is by the training of the personnel of the purchaser. The contractor should be obligated to supply the purchaser with an organizational chart showing the personnel requirements for the operation and maintenance of the works. This will aid the purchaser to determine his training requirements (paragraph 23). Issues to be dealt with in the contract may include the categories and numbers of trainees, their qualifications, the procedure for selecting the trainees, and the places at which they are to receive training (paragraphs 24 and 25).

The training obligations of the contractor should be clearly defined. The contractor may be obligated to supply to the purchaser a training programme which will permit the works to be operated by the purchaser's personnel. The programme may include a time-schedule for training, and describe the nature of the training to be given. The contractor should be obligated to engage trainers with qualifications and experience appropriate for the training (paragraphs 26 and 27). The contract should also fix the payment conditions relating to the training. However, for practical reasons, some issues relating to the training programme may need to be settled after the conclusion of the contract (paragraphs 28 and 29).

A. General remarks

- 1. The works to be constructed will embody various technological processes necessary for production by the works. The purchaser will require a knowledge of the use and application of these various processes. The purchaser will also wish to acquire the technical information and skills necessary for the operation and maintenance of the works. The communication to the purchaser of this knowledge, information and skills is often referred to as the transfer of technology.
- 2. It may be noted that differing contractual arrangements can be adopted for the supply of technology and the performance of the other obligations necessary to construct the works (see chapter II, "Choice of contracting approach"). The purchaser may select a contractor who is able to supply the technology to be embodied in the works, as well as to construct the works or that portion of the works which embodies the technology. The purchaser may also enter into one contract for the supply of the technology, and into separate works contracts for the construction of the works embodying that technology.
- 3. The transfer of technology may occur in different ways. It may occur through the grant of licences to use products or processes which are the subject of patents or other forms of industrial property. Most legal systems provide for the registration, subject to certain conditions, of industrial products or processes which are thereby recognized and protected as industrial property within the territory of the country in which the registration takes place. The owner of the industrial property obtains the exclusive right to exploit the products or processes which are the subject of the industrial property. A common form of industrial property consists of patents. Under the legal systems of many countries, a person who invents a product or process can apply to the government for the grant to him of a patent protecting the invention. Once a patent is granted, for a limited period determined by the legal system the invention which is the subject-matter of the patent can be exploited (e.g. manufactured, used, sold) only with the consent of the patent holder. Most legal systems also recognize other forms of industrial property. For example, a distinctive sign used to identify goods and indicate their origin (e.g. as coming from a particular manufacturer) may be protected through registration as a trade mark. A protected trade mark cannot be used without the consent of the registered owner of the trade mark. A patent holder or the owner of a trade mark may license the patent or trade mark to the purchaser (i.e. permit the purchaser, subject to the conditions of the licence, to use the subject-matter of the patent, or the trade mark, in return for remuneration).
- 4. Certain industrial processes may be known only to one or a few entities. These entities may not have wished, or may have been unable, to protect the industrial processes through registration in accordance with the law relating to industrial property. They may, instead, keep this knowledge confidential. In such cases the transfer of technology may occur through the communication of this

- knowledge (generally called know-how) to the purchaser. Such communication is usually subject to conditions as to the maintenance of confidentiality by the purchaser (see paragraphs 18 and 19, below).
- 5. The information and skills necessary for the operation and maintenance of the works may be communicated by the contractor through documents, e.g. operating manuals (see paragraphs 21 and 22, below). They may also be communicated through the training of the personnel of the purchaser (see paragraphs 23 to 29, below). It may be noted that the different ways in which technology is transferred referred to in this and the previous paragraphs may be combined.
- 6. This Guide does not attempt to deal comprehensively with contract negotiation and drafting relating to the licensing of industrial property, or the communication of know-how, as this subject has already been dealt with in detail in publications issued by certain United Nations bodies.² The present chapter merely notes certain major issues which the parties may wish to address when a works contract contains provisions relating to the licensing of industrial property or the communication of know-how. Issues relating to the pricing of technology are dealt with in chapter VII, "Price".
- 7. In drafting their contract provisions relating to the transfer of technology, the parties should take account of mandatory legislation regulating such transfers which may be in force in the purchaser's and the contractor's countries.3 The transfer may be regulated directly (i.e. through laws specifically directed at contracts involving the transfer of technology). Among those laws are legal regulations prohibiting or restricting the transfer of certain kinds of advanced technology. Contracts violating the prohibitions or restrictions may be void or unenforceable. Under some legal regulations contracts involving the transfer of technology require the approval of a governmental institution prior to their entry into force. Such an institution may have the power to require the deletion or modification of terms which are contrary to the national policy on technology transfer. Contracts or

³See WIPO Guide, section U, "Approval of government authorities", and section 0, 7, "Taxation". The legal regulations of several countries relating to the transfer of technology are contained in "Compilation of legal material dealing with transfer and development of technology" (TD/B/C.6/81), 1982.

¹In some countries the term licensing is used to describe both the transfer of industrial property rights and the communication of knowhow. In this chapter the term is used only with the first of these meanings.

²The drafting of agreements for the licensing of industrial property and the communication of know-how is dealt with in detail in World Intellectual Property Organization, Licensing Guide for Developing Countries (publication No. 620(E), hereinafter referred to as the WIPO Guide). The main issues to be considered in drafting such contracts are set forth in Guidelines for Evaluation of Transfer of Technology Agreements, Development and Transfer of Technology Series No. 12(ID/233), hereinafter referred to as the UNIDO Guidelines and in Guide for Use in Drawing up Contracts Relating to the International Transfer of Know-how in the Engineering Industry (United Nations publication, Sales No. 70.II.E.15). Another relevant publication is the Handbook on the Acquisition of Technology by Developing Countries (United Nations publication, Sales No. 78.II.D.15).

contractual provisions which are not approved may be void or unenforceable. Furthermore, legal regulations often exist which make void or unenforceable contractual provisions in transfer of technology transactions which restrain competition between entities, or which hinder the technological development of a country (see paragraph 9, below). Legal regulations may also govern the pricing of technology. They may, for example, require each element of the technology transfer to be separately priced, or regulate the extent of the price payable, or the manner of payment (e.g. the manner in which royalties are to be calculated). Indirect regulation of transfer of technology may occur when export or import licences are not granted in respect of equipment which embodies certain kinds of technology, or when authority to make payment for technology is refused under exchange control regulations. Tax legislation may also affect the drafting of the contract (e.g. by requiring the parties to determine which party is responsible for the payment of tax on income arising from the transfer of technology).

B. Issues common both to licensing and to know-how provisions

1. Description of technology⁴

8. In some cases a precise and comprehensive description of the technology is important, for example, when the purchaser enters into separate contracts with different entities for the supply of the technology and for the performance of the other obligations necessary to construct the works (e.g. supply of the design of the works, the supply of equipment and materials needed to enable the technology to be used in the works). Even if the turnkey contract approach is used, and a single contractor is to perform all the obligations necessary to construct the works, a precise and comprehensive description of the technology to be transferred may be needed to identify a particular technology which the contractor has agreed to supply. In some cases, however, the obligations of a turnkey contractor may be primarily defined in terms of constructing works which produce goods of a quantity and quality stipulated in the contract, and in those cases a general description of the technology to be supplied may be sufficient.

2. Conditions restricting purchaser in use of technology

9. The contractor may sometimes be prepared to transfer technology only if the purchaser accepts certain restrictions on the purchaser's use of the technology, or on his disposal of the products obtained by using the technology. Some of these restrictions are regulated by mandatory national legislation in many countries (e.g. declared void or unenforceable) not only because they create possible hardship to the purchaser, but also because they may conflict with public policy (for exam-

ple, the restrictions may restrain competition, or hinder the development of national technological capabilities). Some legislation at a regional level also exists regulating these restrictions on the basis of the public policy existing within the region.⁵ Attempts are also being made at the global level to formulate norms which would be applicable to these restrictions where they are included in international transfer of technology transactions. 6 For these reasons, this chapter does not attempt to make normative recommendations as to the formulation of these restrictions, but merely describes a few restrictions of special importance in the context of works contracts, and the interests of the parties in regard to those restrictions. The parties should attempt to negotiate provisions which are balanced and which impose only those restrictions necessary to protect the legitimate interests of each party.

10. The contractor might seek to include a provision that the purchaser is obligated to purchase from him, or from sources designated by him, some or all of the materials needed by the works for production. The contractor might seek to include such a provision when, for example, the goods produced by the works can be associated with him by third parties (e.g. if they bear his trade mark), and the quality of the goods depends on the quality of the materials which he wishes to supply. He may also wish to prevent any lowering of the quality of the goods if the goods are to be bought by him, or to be supplied to his customers. Such a provision may, however, be disadvantageous to the purchaser (e.g. he may be able to obtain materials of the same quality as those which the contractor wishes to supply from other sources on more advantageous terms). These competing interests should be weighed in considering the inclusion of a provision on this issue.

11. The contractor might seek to include a provision that the purchaser is prevented from adapting the technology, or from introducing innovations to it. He might seek to include such a provision because he fears that adaptations or innovations by the purchaser may lower the quality of the products obtained by using the technology, and that such a lowering of quality may adversely affect him (see previous paragraph). The purchaser, however, might seek to adapt the technology to suit local conditions, or to introduce innovations which lower the cost of production, even if the adaptations or innovations lead to a slight loss of quality in the products. This loss of quality may not be significant in relation to the purchaser's requirements. Any provision on this issue should reconcile these interests of the parties in a reasonable manner.

⁴See WIPO Guide, section D, 1, "Identification and description of the basic technology".

⁵Articles 85, 86 and 87 of the Treaty establishing the European Economic Community, Rome, 25 March 1957 (United Nations, *Treaty Series*, No. 298, page 11) in relation to the countries of the European Economic Community.

⁶These norms are being negotiated at the sessions of the United Nations Conference on an International Code of Conduct on the Transfer of Technology. The latest (sixth) session of the Conference was held at Geneva from 13 to 31 May 1985, but ended without completing its work. The future course of the Conference will be decided by the General Assembly at its fortieth session.

- 12. The contractor might seek to include a provision that the purchaser is obligated to communicate to the contractor any improvements to the technology made by the purchaser in the course of using it. Such a provision could have certain disadvantages to the purchaser. It could prevent the purchaser from competing with the contractor in the field of technology in question, since the level of technological knowledge of the contractor will be maintained at a level not less than that of the purchaser. If, in addition to being obligated to communicate the improvements to the contractor, the purchaser is also obligated not to disclose them to third parties, the purchaser may be prevented from realizing their full commercial value. If the improvements are to be communicated without remuneration therefor being paid by the contractor, the contractor could benefit at the purchaser's expense. Since each party to a transfer of technology usually has an interest in obtaining improvements to that technology made by the other party, it may be advantageous to both parties that they negotiate a balanced provision for the communication of improvements.
- 13. The contractor might seek to include a provision restricting the purchaser from exporting products manufactured by the use of the technology to specified countries. He may previously have communicated confidential know-how to entities in those countries, and given undertakings to them that in the further communication of the know-how to others he would ensure that those others would not compete in the specified countries. Or, while not holding industrial property rights in the specified countries, he may have licensed his rights in other countries to entities in those countries who are exporting to the specified countries, and who are concerned that their markets in those countries should be protected. The purchaser may himself be interested in principle in export restrictions, since he might wish the contractor to restrict others from exporting to his own country competing products manufactured by using the same technology. On the other hand, the purchaser might seek to have export possibilities after the market capacity in his own country is exhausted. Mandatory legal rules relating to restrictive business practices and to the transfer of technology are of special relevance in the field of export restrictions, and the parties should agree upon an equitable provision, taking those rules into account.

3. Guarantees⁷

14. The guarantees to be given in regard to the performance of the technology supplied may depend on the nature of the contractual arrangements entered into by the parties. If the turnkey contract approach is adopted

and the contractor, in addition to supplying the technology, is also to perform all the other obligations necessary to construct the works, he may be required to guarantee that the works will operate in accordance with specified parameters. The type of parameters used (e.g. product quality, production capacity, utilities consumption, catalyst consumption, or quantity of effluent) will depend on the nature of the works. No separate guarantee concerning the technology may be necessary, as the guarantees concerning the quality and performance of the works would also cover the technology.

15. In some cases, however, the purchaser may enter into separate contracts with different entities for the supply of the technology and for the performance of the other obligations needed for the construction of the works. In such cases the supplier of technology may be unwilling to give an unqualified guarantee of performance similar to that noted in the previous paragraph. He may in such cases be required to give a guarantee that the use of the technology will result in the operation of the works in accordance with certain specified parameters, provided the technology is utilized and the works is constructed in accordance with conditions specified by him (e.g. use of certain construction methods, standards, components and raw materials; use of a certain design for layout of the works; provision of certain operating conditions, such as the temperature in certain areas of the works).

4. Claims by third party9

- 16. The parties might seek to include in their contract an undertaking by the contractor that the use of the technology transferred will not result in claims against the transferee by a third party whose industrial property rights may be infringed by the use. Infringement may occur through the use of the process transferred, or through the distribution of products manufactured by using the process. The parties may also wish to include an undertaking by the purchaser that, where the contractor has to manufacture machinery or equipment in accordance with designs supplied by the purchaser, such manufacture will not infringe the industrial property rights of a third party. Because of the difficulty of conducting a world-wide investigation as to whether third parties may have industrial property rights in the technology transferred, a supplier will normally undertake only that the use of the technology transferred will not infringe the rights of third parties in specified countries.
- 17. The parties might seek to specify the procedure to be followed by them in the event of a claim by a third party that his industrial property rights have been infringed, and that the industrial property rights held by the parties are invalid. Each party may be obligated to notify the other of any claim immediately after he learns of the claim. If legal proceedings are brought against the

⁷See WIPO Guide, section G, 4, "Guarantee of know-how", and UNIDO Guidelines, chapter III, "Performance of know-how — licensor's guarantee obligations". Issues relating to defects covered by a guarantee, the guarantee period, the effect on guarantees of termination for failure of performance by a contractor followed by the employment of a new contractor to complete the work (see paragraph 19, below), and a manufacturer's guarantee are dealt with in chapter XVIII, "Delays, defects and other failures to perform".

⁸See chapter V, "Description of works".

⁹See WIPO Guide, section E, "Special aspects concerning patents", and section S, 2, d, "Warranty against third parties for infringement".

transferee of the technology, the supplier should be obligated to assist him in his defence by, for example, bearing the costs incurred in the defence, giving legal advice, or producing evidence as to the validity of the industrial property rights of the supplier. The parties might seek to determine their rights and obligations during the pendency of the legal proceedings, and in the event that the claim succeeds. The parties may provide, for example, for the suspension of royalty payments by the purchaser during the proceedings. They may further provide, for example, that if the claim succeeds, royalty payments are to cease, that royalties already paid are to be reimbursed, or that modified technology which does not infringe the rights of the third party but which does not adversely affect the capability of the works to operate in accordance with the contract is to be supplied. 10

C. Issue special to know-how provisions: confidentiality¹¹

18. The contractor will usually require the know-how disclosed by him to be kept confidential (see paragraph 4, above). He may require such confidentiality at two stages. Firstly, he may disclose some know-how to the purchaser during negotiations in order to enable the purchaser to decide whether he wishes to enter into a contract, and to make proposals as to contract terms. He will wish the purchaser to keep this know-how confidential. Secondly, if a contract is concluded, the contractor will require the additional know-how disclosed thereafter to be kept confidential. To achieve these results, it may be necessary under some legal systems for the parties, prior to the commencement of negotiations, to conclude an agreement under which the purchaser undertakes to maintain confidentiality with regard to know-how disclosed during negotiations, and thereafter to include provisions on confidentiality in the works contract if the negotiations lead to the conclusion of a contract. Other legal systems, however, contain obligations as to the observance of good faith during negotiations which may make the conclusion of an agreement prior to negotiations unnecessary.

19. The extent to which obligations as to confidentiality can be imposed on the purchaser may be regulated by mandatory legal rules in the purchaser's country. Issues to be addressed by such contractual provisions on confidentiality may include clear identification of the knowhow to be kept confidential, the duration of the confidentiality (e.g. a fixed period) and the extent of permissible disclosure (e.g. disclosure being permissible in specified

 10 The possible rights and obligations of the parties are discussed in WIPO Guide, section E, "Special aspects concerning patents", paras. 202-205.

circumstances, or to specified persons). The parties might seek to provide that once the know-how to be kept confidential reaches the public domain, the obligation of confidentiality terminates, as does the obligation to pay royalties. The parties may also wish to provide, for example, that an engineer employed by the purchaser to supervise the construction should be allowed access to such of the know-how as is necessary for him to exercise effective supervision. They may further wish to provide that if the contract is terminated by the purchaser because of a failure of performance by the contractor, or because the contractor is prevented by an exempting impediment from completing the construction (e.g. regulations in the contractor's country prevent him from exporting certain equipment), and the purchaser wishes to complete the construction by engaging another contractor, the purchaser may disclose to the other contractor such part of the know-how as is necessary for completion of construction by the other contractor. The purchaser may, however, be obligated to obtain from the other contractor prior to the disclosure of the know-how to him an undertaking that the latter will not disclose the know-how to others.

D. Communication of technical information and skills

20. The purchaser will usually wish to be provided by the contractor with the technical information and skills necessary for the proper operation and maintenance of the works. Such information and skills are normally conveyed through the supply of technical documentation and through the training of personnel.

1. Supply of documentation

21. The documentation to be supplied may consist of plans, drawings, formulae, manuals of operation and maintenance, and safety instructions. It may be advisable to list in the contract the documents to be supplied. The contractor may be obligated to supply documents which are comprehensive and clearly drafted, and which are in a specified language. It may be advisable to obligate the contractor, at the request of the purchaser, to give demonstrations of procedures described in the documentation if the procedures cannot be understood without demonstrations.

22. The points of time at which the documentation is to be supplied may be specified. The supply of all documentation should usually be completed by the time fixed in the contract for completion of construction, and the parties might seek to provide that construction is not to be considered as completed unless all documentation relating to the operation of the works has been supplied. It may be advisable to provide that some documentation (e.g. operating manuals) is to be supplied during the course of construction, as such documentation may enable the purchaser's personnel or engineer to obtain an understanding of the working of machinery or equipment while it is being erected. It may also be advisable to

¹¹See WIPO Guide, section G, 2, "Legal means for preventing communication, disclosure or use of valuable information and expertise". In addition to confidentiality in respect of know-how, the contractor may require confidentiality in respect of documents describing the scope and quality of the works. This is dealt with in chapter V, "Description of works".

provide that the contractor is liable to pay damages for loss caused to the purchaser through any errors or omissions in the documentation.

2. Training of personnel

- 23. In order to enable him to decide on his training requirements, in the invitation to tender or during the contract negotiations the purchaser might request the contractor to supply him with an organizational chart showing the personnel requirements for the operation and maintenance of the works, including the basic technical and other qualifications which the personnel must possess (see also chapter XXVI, "Supplies of spare parts and services after construction"). This statement of requirements should be sufficiently detailed to enable the purchaser to determine the extent of training required in the light of the personnel available to him. The contractor will often have the capability to provide the training. In some cases, however, the training may be given more effectively by a consulting engineer, or through an institution specializing in training.
- 24. It would be advisable for the contract to fix the categories of employees in respect of which training is to be given (e.g. chief mechanical engineer, electrical engineer), and the numbers to be trained. It would also be advisable to fix the qualifications which trainees for a particular post must possess (e.g. educational background, linguistic abilities, technical skills, work experience). If these qualifications are not agreed in the contract, the contractor may have grounds for attributing the failure of the training to lack of relevant qualifications. The parties may also wish to provide that the selection of trainees is to be done jointly by the parties. Despite these procedures, the contractor may find during training that it is not feasible to train a particular trainee. The contractor may in those cases be obligated to inform the purchaser of, and provide supporting evidence for, his finding as soon as he makes it. The parties should thereafter be obligated to consult with a view to reaching an appropriate solution.
- 25. Training will often be required both on site and at places abroad. The places abroad at which training is to be given may be specified. While these would normally be the contractor's places of manufacture, in some cases the appropriate training might be available only at works or factories of third parties (e.g. equipment suppliers). In such cases, the contractor may be obligated to obtain placement of the trainees at those places. It may be advisable to provide that the operational conditions at the places of training are to be similar to those which the trainees will later encounter in the works. The contractor may also be obligated to assist in obtaining necessary visas, entry permits or work permits when training is to be given abroad.
- 26. The training obligations of the contractor in relation to each category of trainee should be clearly defined. In this connection, the contract may obligate the contractor

- to supply to the purchaser a training programme which will enable the trainees to obtain the information and skills necessary for the proper discharge of their duties in the operation and maintenance of the works. The programme may include a time-schedule for training which is harmonized with the time-schedule for construction. The parties may provide that the training is to be completed by the time agreed for the completion of construction. The programme should also describe the nature of the training to be given. The contract may provide that this programme is to be approved by an engineer engaged by the purchaser.
- 27. The contract should also obligate the contractor to engage trainers with qualifications and experience appropriate for the training and to notify the purchaser before the commencement of training of the qualifications and experience of the trainers to be used. In formulating training obligations, the parties may wish to take into account legal regulations governing the employment of the personnel to be trained, which may regulate the manner in which personnel may be trained. Where the parties enter into a product-in-hand contract (see chapter II, "Choice of contracting approach"), the contractor is obligated to prove during a test period that the works can be successfully operated by the purchaser's staff. While in such a case the training obligations of the contractor may not be separately defined, he must give the purchaser's staff the training required by them for operating the works.
- 28. In some cases, only minimal training of the personnel of the purchaser may be necessary, e.g. making them acquainted on site with the procedures for operating and maintaining the plant. The parties might seek to agree that no price is to be paid for such training, as it would be ancillary to the obligations of the contractor to supply and construct the works. Where more extensive training is required, the price for the training might be included in the overall price charged for the construction, or it might be charged separately. The purchaser is better able to assess the costs of training when the price is charged separately. The price may be payable in instalments (e.g. a percentage as an advance payment, a further percentage during the performance of the training programme, and the balance after proof of completion of the programme). The training programme may involve other costs (e.g. the living expenses of the trainees in the contractor's country, or the living expenses of the contractor's trainers in the purchaser's country), and the allocation of those costs should be settled. The contract may provide that the portion of the price for the training which covers costs incurred in the purchaser's country should be paid in the currency of that country.
- 29. For practical reasons, at the time of the conclusion of the contract it may not be possible to settle some issues which arise in regard to training (e.g. the date for commencement of training, or the duration of training). The parties should agree that such issues should be settled by the parties within a specified period of time after the conclusion of the contract.

[A/CN.9/WG.V/WP.17/Add.9]

Chapter XXV. Termination of contract

Summary

It is desirable for the contract to include a termination clause in order to provide for an orderly and equitable termination in the event of circumstances which make it prudent or necessary to terminate the contract. Termination should be regarded as a remedy of last resort. Parties should attempt to use other measures or remedies provided by the contract in order to deal with a situation before resorting to termination. In addition, it may be desirable for a party intending to terminate the contract to notify the other party in order to give the other party an opportunity to remedy the situation asserted as justifying termination (paragraphs 1 to 5).

A party should be able to terminate the contract only in respect of the portion of the construction which has not yet been performed, and not also in respect of construction which has already been effected (paragraph 6).

The parties may wish to entitle the purchaser to terminate the contract in the event of a failure to perform by the contractor which has serious consequences. For example, the purchaser may be entitled to terminate if the contractor abandons construction (paragraphs 7 and 8). In some cases the parties may wish to entitle the purchaser to terminate if the contractor is in delay (paragraphs 9 to 11), if the contractor fails to remedy defects in construction or design (paragraph 12), and if the contractor assigns the contract or certain contractual rights and obligations, or sub-contracts, in violation of restrictions on assignment or sub-contracting (paragraphs 13 and 14).

The contract might entitle the purchaser to terminate if bankruptcy or similar or related proceedings are instituted in respect of the contractor (paragraphs 15 to 17). The purchaser might also be entitled to terminate if bankruptcy or similar or related proceedings are instituted in respect of a guarantor under a performance guarantee supplied by the contractor and the contractor fails to arrange for the provision of a performance guarantee by a guarantor acceptable to the purchaser (paragraph 18).

The parties may wish to consider whether the purchaser should be entitled to terminate the contract at his convenience (paragraph 19).

The parties may wish to entitle the contractor to terminate the contract in the event of non-payment by the purchaser, and perhaps if the purchaser interferes with the contractor's right to payment by, for example, failing to provide a letter of credit or failing to accept a completed stage of construction (paragraph 21).

The contract might also entitle the contractor to terminate if the purchaser interferes with or obstructs the contractor's work, or in the event of bankruptcy or similar or related proceedings being instituted in respect of the purchaser (paragraphs 22 and 23).

If the performance of obligations under the contract is prevented by the occurrence of an exempting impediment, the parties may wish to entitle either party to terminate if because of the impediment performance is suspended for a specified period of time, or if the cumulative duration of two or more suspensions exceeds a specified period of time (paragraphs 24 and 25).

The parties should consider whether the contract should require that the existence of any grounds asserted by a party as justifying termination are to be certified by a third party (paragraph 26).

The contract should specify the rights and obligations of the parties upon termination. The contractor should be obligated to cease construction and to cease incurring obligations to third parties. It is advisable for the contractor to be obligated to take measures to protect or secure various elements of the partially completed works (paragraphs 27 and 28).

The contract might permit the purchaser to use equipment and materials of a contractor who has been terminated by the purchaser due to grounds attributed to the contractor. If the equipment and materials are not used by the purchaser, the contract should obligate the contractor to remove them (paragraphs 29 and 30).

The parties should consider obligating the contractor to assign his sub-contracts to the purchaser, or to terminate those contracts, if requested by the purchaser, in cases where the contract is terminated for grounds attributable to the contractor. The contract should authorize the purchaser to make payment of sums owed by the contractor to sub-contractors and entitle the purchaser to recover them from the contractor (paragraphs 31 and 32).

In some cases where the contract is terminated by the purchaser the contract should obligate the contractor upon termination to deliver to the purchaser drawings, descriptive documents and similar items relating to the works, and to create and deliver items which have not yet been created (paragraph 33).

The contract should specify the payments which are to be made by one party to the other in the event of termination. Whether payments are to be made, and the extent of the payments, may depend on the cause for the termination (paragraphs 34 to 40).

The contract should specify those provisions which are to survive the termination and continue to bind the parties (paragraph 41).

A. General remarks

1. Circumstances may arise which make it prudent or necessary to terminate the contract before it has been completely performed. It is desirable for the contract to include a termination clause in order to provide for an orderly and equitable termination in the event such circumstances arise. This chapter deals with possible provisions of a termination clause in the contract. It does not deal with situations in which a contract may be void or voidable under the law applicable to the contract.

- 2. Termination of a works contract should be regarded as a remedy of last resort. Even when events occur which may give rise to a right of termination, it would usually be in the interest of both parties to attempt to deal with the situation by relying upon other measures or remedies provided in the contract (such as requiring performance in accordance with the contract, suspending performance of the contract, requiring defects in performance to be remedied, re-negotiating and varying contractual provisions and claiming damages). In addition, in order to give the other party an opportunity to remedy the situation, it may be desirable that before a party can terminate the contract he be obligated to notify the other party of the existence of a situation asserted as justifying termination.
- 3. In drafting a termination clause the parties should take account of any mandatory rules of the applicable law on the subject. In certain legal systems rules may exist which restrict the freedom of the parties to agree upon termination provisions, or which otherwise regulate the termination of a contract. The parties should also be aware of any non-mandatory rules of the applicable law relative to termination, and should consider whether those rules are sufficient and appropriate to regulate termination of the contract. General legal rules on termination of contracts are often ill-suited to the termination of works contracts.
- 4. In some legal systems a contract can be terminated only with judicial consent unless the contract expressly authorizes a party to terminate without that consent. In those legal systems, if the parties wish to be entitled to terminate without judicial authorization, the termination clause must so specify.
- 5. The parties may wish to provide in the contract that a failure by a party to exercise a right to terminate the contract does not constitute a waiver of the right.

B. Extent of termination

6. A party should be able to terminate the contract only in respect of the construction which has not yet been performed. He should not be able to terminate the contract in respect of construction which has already been performed, since this would require each party to return what he has received from the other. This would be difficult or impossible in the case of an industrial works; for example, the purchaser would not be able to return to the contractor the portion of the works which has been constructed on the purchaser's land. In addition, the parties may wish certain contractual rights and obligations to remain in effect even after termination of the contract (see paragraph 41, below).

C. Grounds for termination

1. Unilateral termination by purchaser

(a) Failure to perform

7. In the construction of a works there frequently occur departures by the contractor from certain of his contractual obligations which are technically failures to perform, but which are either trivial or can be easily remedied. Other failures by the contractor to perform may have serious consequences, for example by interfering with the time-schedule for construction or affecting the quality of the completed works. The parties may wish to restrict the right of the purchaser to terminate the contract in the event of a failure to perform by the contractor to failures which have serious consequences. An approach which the parties may wish to consider in this regard is to specify in the termination clause certain serious types of failures to perform by the contractor which would entitle the purchaser to terminate the contract. Examples of failures of this type are discussed in paragraphs 8 to 14, below.

(i) Abandonment of construction

8. The purchaser may be permitted to terminate the contract if the contractor abandons the construction.

(ii) Delay in construction

- 9. If the contractor fails to commence construction at the time stipulated in the contract, the contract may entitle the purchaser to notify the contractor that he is required to commence. If the contractor does not do so within a reasonable or specified period of time after the notice, the contract may permit the purchaser to terminate.
- 10. Works contracts often contain or provide for a construction time-schedule which, when several contractors are involved, serves to co-ordinate various phases of the construction and the work of the various contractors (such as the supply of equipment and materials and the

¹Illustrative provisions

[&]quot;The purchaser may, without the authorization of a court or any other authorization, terminate the contract in respect of the construction which has not yet been performed in accordance with the following provisions:

[&]quot;(a) If the contractor abandons the construction, the purchaser may terminate the contract by delivering to the contractor a written notice of termination;

[&]quot;(b) If the contractor fails to commence construction at the time set forth in article ... of this contract, the purchaser may deliver to the contractor written notice requiring him to commence. If the contractor fails to do so within [a reasonable time] [x days] after delivery of such notice, the purchaser may terminate this contract by delivering to the contractor a written notice of termination;

[&]quot;(c) If the contractor fails to complete a portion of the construction by an obligatory milestone date set forth in article ... of this contract, the purchaser may deliver to the contractor written notice requiring him to complete that portion of the construction. If the contractor fails to do so within [a reasonable time] [x days] after delivery of such notice, the purchaser may terminate this contract by delivering to the contractor a written notice of termination;

[&]quot;(d) [further grounds may be specified, e.g. those discussed in paragraphs 12 to 14]."

erection of the works, see chapter IX, "Construction on site"). A failure by a contractor to meet an obligatory milestone on the date specified in the time-schedule may not prevent the final completion date from being met, since the contractor might be able to hire extra labour or take other measures to accelerate the performance of the balance of his work, and make up the time lost during the delay. However, a failure to meet an obligatory milestone on the date specified may result in the liability of the purchaser to other contractors who suffer financial loss because of an inability to commence their work on time due to the failure in co-ordination, and the purchaser would normally be able to claim damages for that liability from the contractor in delay. The contract may entitle the purchaser to notify the contractor that he is required to complete the portion of the construction to which the milestone relates, and, if the contractor fails to complete that portion within a reasonable or specified period of time after the notice, to terminate the obligation of the contract in relation to that portion. Alternatively, the contract might entitle the purchaser to terminate the entire contract (see chapter XVIII, "Delay, defects and other failures to perform").

11. Under another approach, the termination clause could provide that the purchaser may terminate the contract after the accumulation of a specified amount of unexcused delay by the contractor (see chapter XXI, "Exemption clauses"). Alternatively, when delays by the contractor obligate him to pay liquidated damages to the purchaser (see chapter XIX, "Liquidated damages and penalty clauses"), termination may be permitted after a specified amount of liquidated damages has accumulated. The amounts of unexcused delay or liquidated damages which would permit termination should be so quantified that their accumulation would result in a serious delay in completing the works.

(iii) Defective construction

12. The contract might entitle the purchaser to inspect the construction while it is in progress, and to notify the contractor to stop defective construction and to effect the construction in accordance with the contract (see chapter XVIII, "Delay, defects and other failures to perform"). The purchaser may be entitled under the contract to terminate the contract if the contractor fails to remedy within a reasonable or specified period of time after the notice defects which would prevent the works from operating in accordance with the contract. In addition, in cases where the contractor supplies a design for the whole or part of the works and both he and one or more other contractors are to construct according to that design, the contract might provide for the purchaser to notify the contractor who supplies the design of any defects in it which would prevent the works from operating as required by the contract, and to terminate the contract if the contractor does not make good the defects within a reasonable or specified period of time after the notice (see chapter XVIII, "Delay, defects and other failures to perform").

- (iv) Violation of restrictions on assignment and subcontracting
- 13. As discussed in chapter XXVII, "Transfer of contractual rights and obligations", the contract might prohibit the contractor, without the purchaser's consent, from assigning the contract so as to substitute another party for himself, or from assigning certain contractual rights and obligations. The contract might entitle the purchaser to terminate the contract if an assignment by the contractor in violation of those restrictions is valid under the law governing the assignment. However, the parties might consider whether the purchaser should also be entitled to terminate the contract even though the assignment is invalid under the law governing it.
- 14. The contract might also restrict the ability of the contractor to engage sub-contractors to perform his obligations (see chapter XI, "Sub-contracting"). The parties may wish to consider whether the purchaser should be able to terminate the contract if the contractor sub-contracts in violation of those restrictions.

(b) Bankruptcy or insolvency of contractor

- 15. The contract and its performance will be subject to mandatory legal rules in the event of the bankruptcy of a party. Under most legal systems, the assets of the bankrupt, including his rights and obligations under the contract, will pass from his control to that of an officer. This officer will usually cease carrying on the business of the bankrupt in the ordinary course, except to the extent necessary to protect the assets of the bankrupt and the rights of creditors. In addition, during the pendency of bankruptcy proceedings involving the contractor, the officer will be severely restricted in his ability to subcontract or to purchase from third parties materials or supplies needed to carry out the work, or to make payments which fall due after the bankruptcy. The parties may therefore wish to consider whether the institution of bankruptcy proceedings in respect of the contractor should entitle the purchaser to terminate the contract. If so, the parties should take account of the relevant bankruptcy laws in drafting termination provisions. For example, in some legal systems a party to a contract cannot terminate the contract solely on the ground that the other party is bankrupt.
- 16. The parties may wish to consider whether the purchaser should have the right to terminate immediately upon the institution of bankruptcy proceedings, or only after a period of time. The possibility of immediate termination could enable the purchaser to prevent the contractor from incurring additional obligations to third parties for which the purchaser might be responsible. On the other hand, in the case of bankruptcy proceedings initiated against the contractor, the parties might wish to entitle the purchaser to terminate only after a specified period of time following notice to the contractor in order to give the contractor an opportunity to have the proceedings dismissed or stayed. It may be noted, however, that such an approach could result in loss to the purchaser in

some cases, e.g. by his being unable to engage another contractor until the lapse of the period of time.

- 17. The parties may wish to designate as a ground for termination by the purchaser not only bankruptcy, but also similar or related proceedings to which the contractor may be subject, and which could significantly interfere with his performance of the contract (e.g. receivership, liquidation, insolvency, assignment of assets and comparable proceedings under relevant laws).
- 18. When the contract requires the contractor to furnish a performance guarantee, the parties may wish to consider permitting the purchaser to terminate if the guarantor becomes subject to the proceedings of the type described above, and the contractor fails to arrange for the provision of a performance guarantee by another guarantor acceptable to the purchaser within a reasonable or specified period of time.

(c) Termination for convenience

19. The parties may wish to consider whether the purchaser should be entitled to terminate the contract at his convenience, i.e. without being justified by any grounds otherwise specified in the contract. In practice this right is given only to purchasers who are Governments or government entities, which may for policy reasons wish to have this right. The contract might provide that if a purchaser purports to terminate on a ground specified in the contract, and it is subsequently determined that termination under that ground was unjustified, the termination is to be regarded as a termination for convenience. As discussed in paragraphs 38 and 39, below, the consequences of the exercise by the purchaser of a right to terminate the contract at his convenience may differ from the consequences of his termination on other specified grounds. In particular, the cost to the purchaser of the exercise of this right may be such as to discourage him from doing so except in exceptional circumstances. If the purchaser is to be permitted to terminate at his convenience, the contract may permit the termination to be effective immediately upon notice to the contractor.2

2. Unilateral termination by contractor

(a) Failure to perform

20. The parties may wish to consider whether the contractor should be entitled to terminate in the event of a failure to perform by the purchaser. The purchaser's principal obligation under the contract is to pay the

agreed price. However, he may also have obligations which are related to the contractor's right to receive payment, such as providing a letter of credit or accepting completed construction. The purchaser may have additional obligations under the contract, such as making the site available to the contractor, and in some cases obligations to perform or to provide for the performance of some of the construction.

- (i) Non-payment by purchaser; failures to perform interfering with contractor's right to payment
- 21. A failure by the purchaser to pay the contractor, or failures which prevent the contractor from receiving payment, could entail serious consequences for the contractor. For example, if he finances his construction in part with interim payments he may be unable to proceed with the work in the absence of those payments. The parties may wish to provide that the contractor may notify the purchaser that he is required to pay sums due to the contractor (after setting off amounts owed by the contractor to the purchaser, such as the costs of repairing defective work, liquidated damages payable by the contractor, and authorized direct payments made by the purchaser to subcontractors (see chapter XI, "Subcontracting")), and to entitle the contractor to terminate the contract if the purchaser does not pay within a reasonable or specified period of time after the notice. This remedy may be limited to cases where the purchaser has failed to pay a certain percentage of the total price, or a certain amount. In addition, the contract might entitle the purchaser to terminate if the purchaser fails to provide an agreed payment guarantee or a letter of credit (see chapter XVII, "Security for performance"), or to accept a completed stage of the construction (see chapter XIII, "Completion, take-over and acceptance").
 - (ii) Interference with or obstruction of contractor's work
- 22. The contractor might be permitted to terminate the contract if the purchaser seriously interferes with or obstructs the contractor's work. This could occur, for example, if the purchaser fails to make the site or portions of the site available to the contractor on time. In contracts in which the purchaser has obligations with respect to the supply of materials for the construction, obstruction could occur from a failure to perform those obligations. The contract may provide for the contractor to notify the purchaser to cease an interference with or obstruction of his work, and entitle the contractor to terminate the contract if the purchaser fails to do so within a reasonable or a specified period of time.

(b) Bankruptcy or insolvency of purchaser

23. The parties may consider whether the contractor should be able to terminate the contract if the purchaser becomes subject to bankruptcy, insolvency or similar proceedings. Considerations similar to those discussed in paragraphs 15 to 17, above, concerning the bankruptcy of the contractor are also applicable here.

²Illustrative provisions

[&]quot;(1) The purchaser may at any time, and without the authorization of a court or any other authorization, terminate this contract or any part thereof for any reason other than those set forth in article ... by delivering a written notice of termination to the contractor.

[&]quot;(2) If the purchaser purports to terminate this contract or any part thereof for a reason set forth in article ..., and it is subsequently determined in dispute settlement proceedings that termination for that reason was not justified, the termination shall be regarded as having been effected pursuant to the provisions of paragraph 1 of this article."

3. Prevention of performance due to exempting impediment

- 24. During the course of construction, events can occur which prevent either party from performing obligations under the contract. The contract might in some of these cases exempt the party from liability for failure to perform. However, it may obligate the party who is prevented from performing by an exempting impediment to notify the other party of the occurrence of the impediment, and provide for the parties to deliberate on what measures should be taken to deal with the exempting impediment (see chapter XXI, "Exemption clauses", chapter XXIII, "Variation clauses" and chapter XXIV. "Suspension clauses"). The parties might be able to estimate the likely duration of the exempting impediment, and thus the amount of time that the obligations affected by the impediment will not be able to be performed. This could provide a basis for a determination by the parties as to what action to take. For example, if the impediment is likely to persist only for a short period of time, the parties might merely suspend performance of the affected obligations for the duration of the impediment. If the impediment is likely to persist for a long period of time and seriously interfere with or prevent the completion of the construction or the payment of the contractor, the parties might agree to terminate the portion of the contract relating to the affected obligations, or, if necessary, the entire balance of the contract.
- 25. The parties may wish to provide in the contract that if performance is suspended due to an exempting impediment for a specified period of time, or if the cumulative duration of two or more suspensions exceeds a specified period of time, either party is entitled to terminate the contract (see chapter XXIV, "Suspension clauses"). The period of time which would entitle a party to terminate should be so quantified that suspension for this period would result in a serious delay in completing the works. If only a portion of the construction is suspended as a result of the exempting impediment, the contract might permit the terminating party to terminate only the part of the contract dealing with that portion. Under provisions such as these, the termination would be permitted because of the suspension of performance for an excessive amount of time, rather than because of the existence of the exempting impediment per se. Termination would be permitted in spite of the existence of the exempting impediment; the legal effect of the impediment would be to exempt the non-performing party from the payment of damages (see chapter XXI, "Exemption clauses").

D. Establishment of grounds for termination

26. The parties should consider whether a party may terminate the contract upon his own assessment that grounds for termination exist, subject to challenge in dispute settlement proceedings, or whether the existence of grounds for termination must be verified by a third party. In contracts in which an engineer exercises independent functions (see chapter X, "Consulting engineer"), certification by the engineer of the occur-

rence of the events asserted to be grounds for termination could help to avoid disputes as to the existence of those grounds (see chapter XXIX, "Settlement of disputes").

E. Rights and obligations of parties upon termination

1. Cessation of work by contractor

- 27. It would be desirable for the contract to specify that upon termination by either party the contractor must cease construction and must cease incurring obligations to third parties such as sub-contractors and suppliers in respect of the construction.
- 28. In many instances it will not be feasible or advisable for the contractor simply to cease construction and leave the site at the moment the termination takes effect. Certain operations in progress may have to be completed, and measures may have to be taken to protect or secure various elements of the partially completed works. It is advisable for the contract to obligate the contractor to take those measures. With respect to the question of which party is to bear the cost of such measures, see subsection 5, below. The contract should also expressly obligate the contractor to vacate the site without delay once all work has finally stopped, or when ordered to do so by the purchaser, and to require him to ensure that persons or firms engaged by him also vacate the site in those circumstances.

2. Use and disposition of contractor's equipment and materials

- 29. When the contract is terminated by the purchaser due to grounds attributable to the contractor, it might be important for the purchaser or a new contractor to be able to use equipment and materials belonging to the original contractor in order to continue the work. If so, the termination clause should expressly authorize this.
- 30. If the purchaser does not wish to use the contractor's equipment in continuing the construction, or if the purchaser is not otherwise given rights in respect of it, the contractor may be obligated to remove it from the site within a reasonable period of time. If he fails to do so, the purchaser could be empowered to have it removed at the contractor's expense, or to sell it through appropriate means and apply the proceeds towards sums owed to the purchaser by the contractor. Alternatively, the contract may entitle the purchaser to use the equipment upon payment of a rental, or to purchase it at a price to be agreed by the parties or established by an independent valuer. Parties should be aware, however, that these approaches may be subject to or restricted by mandatory rules of applicable law; parties should therefore take such rules into account in drafting provisions of this nature. The parties may wish to determine the extent of the purchaser's liability for loss of or damage to the equipment (see chapter XIV, "Passing of risk").

3. Assignment of third-party contracts and assumption of liabilities

- 31. When termination occurs there may exist outstanding contracts which the contractor has entered into with sub-contractors and suppliers. If the construction is to be completed by the purchaser or by another contractor engaged by the purchaser, the purchaser may wish to take over some of these contracts. Alternatively, he or the new contractor may wish to enter into new contracts with these sub-contractors or suppliers. This may be the case if the original contract is not assignable, or if the purchaser or new contractor does not wish to assume all of the obligations due from the terminated contractor to the sub-contractors or suppliers by taking an assignment of the contracts. The conclusion of such new contracts may be practicable only if the sub-contractors or suppliers are released from their contracts with the contractor. Therefore, in cases where the contract is terminated for grounds attributable to the contractor, parties should consider obligating the contractor to assign the contracts, if assignment is possible, or to terminate them, if requested by the purchaser.
- 32. When the assignment of a contract, or a new contract with a sub-contractor or supplier, is contemplated, difficulties may arise because of sums owed to these third parties by the contractor. The third party may not wish to continue his participation in the construction unless past sums owed to him by the original contractor are paid. Furthermore, the third party may refuse to deliver items which were contracted for prior to termination but for which payment has not yet been made, or may even take back equipment and materials which have already been delivered. The purchaser may therefore want the authority to pay the third party directly for sums owed to the latter by the original contractor, and to recover these payments from the original contractor. If the purchaser accepts an assignment of the third party contract, he will under most legal systems be obligated to pay these past-due sums. The contract should expressly authorize such direct payments and entitle the purchaser to recover them from the contractor.

4. Drawings, descriptive documents and similar items

33. If the purchaser intends to complete the work left unfinished by the terminated contractor, the purchaser may wish to obtain the drawings, designs, calculations, descriptions, documentation for know-how and engineering and other such items relating to the construction which has been completed by the contractor, as well as for construction yet to be completed. Obtaining such documentation or information may be important if the construction or technology is known only to the contractor, or if the items cannot for other reasons be created by an engineer or a new contractor. The contract should therefore obligate the contractor upon termination by the purchaser to deliver to the purchaser such of those items as are in the possession of the contractor. In some cases, however, the contractor may be prevented from doing so because a third party has industrial property rights in

respect of the items, and may not consent to their delivery to the purchaser. In addition, it might be desirable to obligate the contractor to create and deliver drawings and documents (e.g. operation manuals) which have not yet been created, particularly when it would be difficult or impossible for another contractor to create them. The purchaser might be required to compensate the contractor for such items, unless compensation has been included within past payments made to the contractor.

5. Payments to be made by one party to other

(a) Termination for grounds attributable to contractor

- 34. The parties may wish to provide that if the contract is terminated for failure to perform or bankruptcy of the contractor, or other grounds attributable to him, he is not entitled to payment for construction which he has not yet performed. However, the contract might entitle him to receive the portion of the price which is attributable to construction which he satisfactorily performed prior to termination. In a cost-reimbursable or unit price contract this price should be relatively easy to ascertain. In a lump sum contract the determination of the price attributable to construction which has been performed would be facilitated if the contract allocated portions of the price to specific elements of the construction (see chaper VII, "Price").
- 35. The purchaser may incur expenses in connection with the termination which he would not have incurred had the contract not been terminated and had the work been completed by the contractor. For example, he may have work done to secure or protect the partiallycompleted works until construction can resume with another contractor, or, if it is impossible to complete the works, he may incur penalties or expenses in connection with the termination of contracts with other contractors or suppliers. In addition, the cost of completing the construction not performed by the terminated contractor could exceed the amount which under the contract would have been due to the contractor in respect of that construction. In addition, the process of selecting and employing a new contractor could delay the completion of the works. So, too, could the time required for the new contractor to integrate himself into the project and continue from where the terminated contractor left off. Losses of this nature may be made compensable to the purchaser by way of damages (see chapter XX, "Damages").

(b) Termination for grounds attributable to purchaser

36. If the contract is terminated for grounds attributable to the purchaser, the contract may entitle the contractor to receive the portion of the price which is attributable to the construction which he has satisfactorily performed, and reimbursement for obligations reasonably incurred in the expectation of completing the works (e.g. for materials ordered). The contract may also obligate the purchaser to reimburse the contractor for his extra expenses occasioned by the termination. These could include, for example, the costs of any measures required to be taken

or requested by the purchaser to secure or protect the works, the cost of repatriating personnel and equipment, to the extent that this has not already been included in the amount to be paid to the contractor, and damages payable by the contractor for terminating contracts with sub-contractors or other third parties. Losses of this nature may be made compensable to the contractor by way of damages.

- (c) Termination arising from circumstances not attributable to either party
- 37. The contract might provide that, if the contract is terminated for reasons not attributable to either party (i.e. suspension for a specified period of time because of an exempting impediment, see paragraph 25, above), the contractor is entitled to receive the portion of the price which is attributable to the construction which he has satisfactorily performed. The parties should consider, however, the most equitable way to deal with their respective expenses occasioned by the termination. One possibility is to share these expenses equally or in accordance with an agreed formula. Another possibility is for each party to bear his own expenses.
- (d) Termination for convenience
- 38. If the contract permits the purchaser to terminate at his convenience, it might, in the event of such a termination, require the purchaser to pay to the contractor the portion of the price which is attributable to the construction satisfactorily performed prior to the termination, as well as for extra expenses incurred by the contractor incidental to the termination (see paragraph 36, above), to the extent that those costs are not already included in the amount to be paid to the contractor. The parties should consider whether the contractor should be entitled to be compensated for some or all of the lost profit on the portion of the contract remaining to be performed. On the one hand, the contractor might have forgone other contracting opportunities in anticipation of completing the contract in its entirety. On the other hand, an

obligation on the purchaser to compensate the contractor for his lost profit might make it financially prohibitive for the purchaser to exercise his right of termination for convenience.

- 39. At the time when the contract is terminated for convenience the purchaser may have received the design for the works from the contractor, but the value of the design may not yet be adequately reflected in the price which would be due to the contractor on the basis of the work which the contractor had satisfactorily performed. To deal with these cases the contract may specify that the purchaser must compensate the contractor for the design insofar as such compensation is not otherwise reflected in the price due to the contractor.
- (e) Damages, liquidated damages or penalties
- 40. In addition to the payments mentioned above, if the termination is for grounds attributable to a party, the other party may be entitled to damages (see chapter XX, "Damages"), liquidated damages or penalties (see chapter XIX, "Liquidated damages and penalty clauses").

F. Survival of certain contractual provisions

41. In some legal systems termination of the contract might be interpreted as bringing to an end all contractual provisions, including those which the parties might wish to survive, such as the rights and obligations of the parties upon termination, guarantees for construction performed, remedies for defective performance, and provisions such as those concerning settlement of disputes and the preservation of confidentiality. The parties should take care to ensure that rights, obligations and remedies which they wish to survive do not lapse upon termination. To do so, the parties should specify in the contract those provisions which are to survive and continue to bind the parties even after termination.

C. Future work in the area of the new international economic order: note by the secretariat (A/CN.9/277)

[Original: English]

CONTENTS

			Paragraph
IN	TR	ODUCTION	. 1-7
I.	PO	OSSIBLE SUBJECTS FOR FUTURE WORK	. 8-59
	A.	Contracts for industrial co-operation	. 8-22
	В.	Joint ventures	. 23-32
		1. Construction of industrial works by joint ventures	. 24-31
		2. Legal aspects of joint ventures in general	· 32