in favour of payment for such retransfer and in favour of applying the same principle for the transfer of improvements of the technology from the contractor to the purchaser.

88. It was agreed that UNCITRAL should not duplicate the work in regard to the proposed code of conduct on transfer of technology. However, it was generally felt that it would be desirable for the legal guide to refer to relevant issues under consideration by UNCTAD so that the parties would be made aware of them.

FUTURE WORK

- 89. There was general consensus that the remaining topics listed in the study by the Secretary-General in A/CN.9/WG.V/WP.4, para. 36 should be completed by the Secretariat and examined by the Working Group.
- 90. It was pointed out that other topics such as maintenance, spare parts, customer's service, technical assistance, variations, financial arrangements, time limits, feasibility studies, modes and effects of notices, supply of raw materials and industrial input, tenders, liability of a consulting engineer, joint and several liability of several contractors and bankruptcy might also be included.
- 91. The Working Group requested the Secretariat to complete the remaining preparatory work for its next session. It was suggested that sufficient time should be made available to the Secretariat to prepare the remaining aspects of this subject in order to make the docu-

ments available well in advance to the participating countries for their study. However, the Group agreed that the Secretariat should be given a discretion regarding the organization of work including the selection of the additional topics suggested.

- 92. The Working Group also entrusted the Secretariat with the drafting of the legal guide.
- 93. As regards clauses related to industrial cooperation, the Working Group considered the note by the Secretariat on the subject (A/CN.9/WG.V/WP.5)* and agreed that work on it be deferred. The Working Group agreed to concentrate its work on contracts for the supply and construction of large industrial works at the present moment. However, it requested the Secretariat to submit, at a future session, a preliminary study on specific features of industrial co-operation contracts after the preparation of the legal guide on contractual provisions relating to contracts for the supply and construction of large industrial works.
- 94. Some views were expressed on when the next session should be held. One suggestion was to hold the next session early in 1982. Another view was that the next session of the Working Group might be arranged just before the next session of the Commission as was done this time so that again many members may be represented. The Working Group expressed its wish to the Commission to take into account the urgency of the project in determining the date of the next session of the Working Group.

B. Working papers submitted to the Working Group on the New International Economic Order at its second session (Vienna, 9-18 June 1981)

1. Study of the Secretary-General: clauses related to contracts for the supply and construction of large industrial works (A/CN.9/WG.V/WP.4 and Add.1-8)*

CONTENTS

Part one	Paragraphs	Page	Paragraphs Pag	gе
[A/CN.9/WG.V/WP.4]			B. Aim and scope of the study 1. Aim of the study)5
INTRODUCTION	ıal	103	tion of large industrial works: a definition)5
study		103	industrial works 28-34 10	05
2. Work of UNIDO		104	4. Scope of study	06
3. Work of ECE	14-16	104	5. Terms and notions	06
4. Work of FIDIC	17-18	104	C. Future work 39-46 10	06

^{*} Referred to in Report, para. 71 (part one, A, above).

^{*} Reproduced in this volume, part two, IV, B, 2.

A. Preliminary remarks 1.2 107 1. Inadequacy of specifications 51.53 127 128 1. Inadequacy of specifications 51.53 128			Part two P	aragraphs	Page	Paragraphs Page	2
A. Preliminary emarks 1-2 107 1. Inadequacy of specifications 54-56 127 128 128 129 128	-		<u>-</u>				
B. Types of document and time for aubmission 1. Preliminary documents 2. Specifications and drawings 3. 108 3. Programme and time schedule 4. Drawings to be provided by contractor intention of the provided by contractor intention of the provided by contractor intention of the provided at the provided at the provided at the provided by contractor intention of the provided at	I.					1 - 7	_
1. Preliminary documents 3 108 2. Specifications and drawings 4 108 3. Programme and time schedule 5-8 108 4. Drawings to be provided by contractor 5-8 108 5. Documents to be provided at the end of the works 14-17 109 6. Modification or variation 18-37 109 19. Documents to be provided at the end of the works 14-17 109 10. Documents in 7-18 109 10. Documents 16-37 10. Docu				1-2	107	l	
1. Preliminary documents		В.				· · · · · · · · · · · · · · · · · · ·	
2. Specifications and drawings 3. Programme and time schedule 5-8 108 2. Right to variation 62-68 128 2. A Drawings to be provided by contractor 6-10 129 2. Right to variation 62-68 128 2. R							3
3. Programme and time schedule. 4. 4. 1. 1. 1. 1. 1. 1			•			I	_
A. Drawings to be provided at the end of the works 14-17 109				4	108		
S. Documents to be provided at the end of the works			3. Programme and time schedule	5-8	108	2. Right to variations 69-74 129	,
S. Documents to be provided at the end of fite works 14-17 109 C. Modification or variation 18-37 109 D. Ownership of the documents 18-38 D. Obligation to provide for documents 111 D. Obligation to supply 46-52 111 D. Obligation to transport materials 53-57 112 D. Obligation to take care of machinery and materials during transportation 58-60 113 D. Obligation to take care of machinery and materials during transportation 58-60 113 D. Obligation to provide for storage of materials at site 61-63 113 D. Obligation to provide for storage of materials at site 61-63 113 D. Obligation and responsibilities 61-65 114 D. Obligation and responsibilities 68-74 114 D. Obligation and responsibilities 68-74 114 D. Obligation and responsibilities 68-74 114 D. Ownership of the documents 110-113 120 D. Ownership of the documents 110-113 121 D. Object of the transfer 126-129 126 D. Object of the transfer 126-129 126 D. Object of the transfer of technology 14 123 D. Confidentiality 19-26 124 D. Confidentiality 19-2			4. Drawings to be provided by con-				
C. Modification or variation 18-37 109			tractor	9-13	108	[A/CN.9/WG.V/WP.4/Add.3]	
C. Modification or variation			5. Documents to be provided at the			VIII. INSPECTION AND TESTS	
D. Ownership of the documents			end of the works	14-17	109	A. General remarks 1-5 130)
D. Ownership of the documents 38-43 111 1. Rights and obligations 6-15 130		C.	Modification or variation	18-37	109		
Superty A. General remarks 44-45 111 A. General remarks 44-45 111 A. General remarks 44-45 111 A. Objections and rights of purchaser 35-39 133 3. Procedure for inspection 32-34 133 3. Objections and rights of purchaser 35-39 133 3. Objections to take care of machinery and materials during transportation 58-60 113 6. Costs of inspection 42-48 134 7. Certification 49-52 135 4. Objection to take care of machinery and materials during transportation 58-60 113 6. Costs of inspection 49-52 135 6. Costs of inspection		D.	Ownership of the documents	38-43	111	· · · · · · · · · · · · · · · · · · ·)
A. General remarks 44-45 111 B. Partier obligations 10 supply 46-52 111 2. Obligation to ransport materials 53-57 112 3. Obligation to take care of machinery and materials during transportation 7. Section 113 4. Obligation to take care of machinery and materials during transportation 7. Section 113 4. Obligation to provide for storage of materials at site 61-63 113 6. C. Time for delivery 64-65 113 8. Doligation to provide for storage of materials at site 61-63 113 8. Legal effect of inspection 49-52 135 8. Legal effect of inspection 53-58 135 8. Legal effect of inspection 53-58 135 8. Legal effect of inspection 53-58 135 8. Legal effect of inspection 75-75 135 8. Precondition 75-75 135 8. Legal effect of inspection 75-75 135 8. Legal effect of inspe	II	SUP	DI V			l	l
B. Parties' obligations 1. Obligation to supply 46-52 111 2. Obligation to transport materials 33-57 112 3. Obligation to transport materials 33-57 113 3. Obligation to provide for storage of materials at site 61-63 113 6. Obligations to provide for storage of materials at site 61-63 113 6. Obligations and responsibilities of contractor, engineer and purchaser 66-67 114 7. Obligations and responsibilities of contractor, engineer and purchaser 7. Obligations and responsibilities of contractor, engineer and purchaser 7. Obligations of plant 7. Sep 153 7. Protocol on performance tests 66-74 114 7. Obligations of purchaser contractor, engineer and purchaser 7. Obligations of the contractor 7. Obligations 7. Obligations 7. Obligations 7. Obligations 7. Obligations 7. Obligations 7. Obl	11.			44-45	111	·	3
1. Obligation to supply					•••	1	
2. Obligation to transport materials 3. Obligation to take care of machinery and materials during transportation to take care of machinery and materials during transportation to take care of machinery and materials during transportation transportation to take care of machinery and materials during transportation transportation to the passing of risk 4. Obligation to provide for storage of contractor, engineer and purchaser of contractor and contractor		ъ.	_	46-52	111		3
3. Obligation to take care of machinery and materials during transportation							1
C. Criffication 49-52 135 135 136 137 13				00 07		6. Costs of inspection	1
### 135 S. Legal effect of inspection 53-58 135							5
A. Obligation to provide for storage of materials at site				58-60	113		5
1. General remarks 59-62 136			•	30-00	113		
C. Time for delivery				61-63	113		5
Section Sect		Ċ				2. Time for performance tests 63-65 136	5
III. EBECTION A. Introduction 66-67 114 8. Obligations and responsibilities of contractor, engineer and purchaser 1. Erection of plant 68-74 114 2. Materials for erection of plant 75-80 115 3. Preparatory work 81-83 115 4. Supervision of work 84-92 116 5. Access to works 93-104 117 6. Labour and working conditions 105-109 118 7. Miscellaneous 110-113 119 100 2. Extension of time 100-103 141 120 2. Completed works 114-116 119 2. Completed works 114-116 119 2. Completed works 114-116 119 2. Completed works 120-125 120 2. Completed works 130-131 121 2. Completed works 130-131		٠.	ime for delivery	04 05	115	-	7
A. Introduction 66-67 114 B. Obligations and responsibilities of contractor, engineer and purchaser 1. Erection of plant 75-80 115 2. Materials for erection of plant 75-80 115 3. Preparatory work 81-83 115 4. Supervision of work 84-92 116 5. Access to works 93-104 117 6. Labour and working conditions 105-109 118 7. Miscellaneous 110-113 119 1V. PASSING OF RISK A. Preliminary remarks 114-116 119 B. Time of the passing of risk 1. Machinery and materials 117-119 120 2. Completed works 120-125 120 C. Obligations of the contractor 126-129 120 C. Obligations of the contractor 126-129 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of property 120-125 120 C. Consequences of the transfer of technology 1-1-13 121 C. Consequences of technology 1-1-13 123 A. Retransfer of technology to be transfer of technology to be transfer of technology to be transfered 120-125 124 C. Consideration of quality 120-125 120 C. Ownership of the technology to be transfered 120-125 120 C. Ownership of the technology to be transfered 120-125 120 C. Ownership of the technology to be transfered 120-125 120 C. Ownership of the technology to be transfered 120-125 120 C. Ownership of the technology to be transfered 120-125 120 C. Ownership of the technology to be transfered 120-125 120-125	III.	ERE	CTION				
Contractor, engineer and purchaser 1. Erection of plant 75-80 115 114 2. Materials for erection of plant 75-80 115 3. Preparatory work 81-83 115 4. Supervision of work 84-92 116 5. Access to works 93-104 117 6. Labour and working conditions 105-109 118 7. Miscellaneous 110-113 119 110-113 119 120 2. Completed works 110-113 119 120 2. Completed works 120-125 120 2. Completed works 120-125 120 2. Completed works 130-131 121 8. Various approaches to the transfer of property 132-138 121 2. Consequences of the transfer of property 132-138 121 2. Consequences of the transfer of technology 1. Object of the obligation 2-6 122 120 2. The price 139-140 123 3. Further transfer of technology 14 123 4. Retransfer of technology 15 15 15 15 15 15 15 1		A.	Introduction	66-67	114		7
Contractor, engineer and purchaser 1. Erection of plant 75-80 115 114 2. Materials for erection of plant 75-80 115 3. Preparatory work 81-83 115 4. Supervision of work 84-92 116 5. Access to works 93-104 117 6. Labour and working conditions 105-109 118 7. Miscellaneous 110-113 119 110-113 119 120 2. Completed works 110-113 119 120 2. Completed works 120-125 120 2. Completed works 120-125 120 2. Completed works 130-131 121 8. Various approaches to the transfer of property 132-138 121 2. Consequences of the transfer of property 132-138 121 2. Consequences of the transfer of technology 1. Object of the obligation 2-6 122 120 2. The price 139-140 123 3. Further transfer of technology 14 123 4. Retransfer of technology 15 15 15 15 15 15 15 1		В.	Obligations and responsibilities of			5. Unperformed performance test 78-83 138	3
1. Eirection of plant							•
2. Materials for erection of plant 75-80 115 3. Preparatory work 81-83 115 4. Supervision of work 84-92 116 5. Access to works 93-104 117 6. Labour and working conditions 105-109 118 7. Miscellaneous 110-113 119 110-113				68-74	114	1 <u>-</u>	•
3. Preparatory work				75-80	115	<u>-</u>	
A. Supervision of work			3. Preparatory work	81-83	115		•
S. Access to works				84-92	116	•	,
6. Labour and working conditions 105-109 118 7. Miscellaneous 110-113 119 C. Delayed completion 104 142 IV. PASSING OF RISK A. Preliminary remarks 114-116 119 B. Time of the passing of risk 1. Machinery and materials 117-119 120 2. Completed works 120-125 120 C. Obligations of the contractor 126-129 120 C. Obligations of the contractor 126-129 120 C. Acceptance of part of works 121 144 A. Preliminary remarks 130-131 121 B. Various approaches to the transfer of property 132-138 121 C. Consequences of the transfer of property 132-138 121 C. Consequences of the transfer of technology 1. Object of the obligation 2-6 122 124 A. Preliminary remarks 1 105-107 142 [A/CN.9/WG.V/WP.4/Add.2] XI. DeLAYS AND REMEDIES 1. Delay in performing other obligations 1-1 121 122 124 144 123 125 125 125 125 125 125 125 125 125 125				93-104	117	· -	n
T. Miscellaneous 110-113 119 119 119 120				105-109	118		-
IV. Passing of Risk			7. Miscellaneous	110-113	119		
A. Preliminary remarks 114-116 119 B. Time of the passing of risk 1. Machinery and materials 117-119 120 2. Completed works 120-125 120 2. Completed works 121 144 2. Empression of part of works 122 144	IV	DAG	SINC OF BIEV			C. Delayed completion 104 142	۵
B. Time of the passing of risk 1. Machinery and materials 117-119 120 2. Completed works 120-125 120 2. Completed works 120-125 120 2. Completed works 126-129 120 2. Completed works 120-125 120 2. Co	14.			114-116	110		
1. Machinery and materials			•	114-110	119		2
2. Completed works 120-125 120 C. Obligations of the contractor 126-129 120 C. Obligations of the contractor 126-129 120 D. Acceptance 110-121 144 V. Transfer of the contractor 130-131 121 E. Presumed acceptance 122 144 E. Presumed acceptance 123-124 144 E. Presumed acceptance 125-133 145 E. Presumed acceptance 126 E. Presumed acceptance 125-133 145 E. Presumed acceptance 125-133		D.		117-119	120		
C. Obligations of the contractor 126-129 120 D. Acceptance of part of works 121 144			•				
V. Transfer of Property		C				<u>-</u>	
A. Preliminary remarks 130-131 121 B. Various approaches to the transfer of property 132-138 121 C. Consequences of the transfer 139-140 122 [A/CN.9/WG.V/WP.4/Add.2] XI. Delays and Remedies 1. Object of the transfer of technology 1. Object of the obligation 2-6 122 2. The price 7-10 123 3. Further transfer of technology 1-13 123 4. Retransfer of technology 14 123 C. Ownership of the technology to be transfered 15-18 123 D. Confidentiality 19-26 124 E. Infringement 27-37 125 D. Quality in works contracts 38-40 1. Workmanship and material 46-47 126 E. Stipulation of limited amount of 123-124 144 144 145 126 E. Stipulation of limited amount of 123-124 144 144 145 126 E. Stipulation of limited amount of 123-124 144 145 126 E. Stipulation of limited amount of 123-124 144 144 145 126 E. Stipulation of limited amount of 123-124 144 144 145 126 E. Stipulation of limited amount of 123-124 144 145 126 E. Stipulation of limited amount of 125-133 145		С.	Congations of the contractor	120 127	120		
B. Various approaches to the transfer of property 132-138 121 C. Consequences of the transfer 139-140 122 [A/CN.9/WG.V/WP.4/Add.2] VI. Transfer of technology A. Preliminary remarks 1 122 B. Object of the transfer of technology I. Object of the obligation 2-6 122 2. The price 7-10 123 3. Further transfer of technology 11-13 123 4. Retransfer of technology 11-13 123 C. Ownership of the technology to be transfered 15-18 123 D. Confidentiality 19-26 124 E. Infringement 27-37 125 VII. QUALITY A. Quality in works contracts 38-40 126 B. Stipulation of quality 41-45 126 B. Legal effects of take-over and accept-ance 125-133 145 [A/CN.9/WG.V/WP.4/Add.4] XI. Delays and Remedies A. Preliminary remarks 1-3 145 B. Kinds of delays and their remedies 1. Delay in performing the main obligations 4-15 146 2. Delay in performing other obligations 16 147 3. Delays due to exonerating events 17-22 147 XII. Damages and Limitation of Liability A. Introduction 23-24 147 B. Exclusion of unforeseeable damage 25-28 148 C. Exclusion of indirect or consequential loss and anticipated profits 29-31 148 D. Reduction in damages in case of failure to mitigate loss 32-35 148 E. Stipulation of limited amount of	V.	TRA					-
Delays and their remedies 1-3 145		Α.		130-131	121		4
C. Consequences of the transfer 139-140 122		В.	Various approaches to the transfer of				
[A/CN.9/WG.V/WP.4/Add.2] VI. Transfer of technology A. Preliminary remarks 1 122 B. Object of the transfer of technology 1. Object of the obligation 2-6 122 2. The price 7-10 123 3. Further transfer of technology 11-13 123 4. Retransfer of technology 14 123 C. Ownership of the technology to transfered 15-18 123 D. Confidentiality 19-26 124 E. Infringement 27-37 125 VII. QUALITY A. Quality in works contracts 38-40 126 B. Stipulation of quality 41-45 126 B. Kinds of delays and their remedies A. Preliminary remarks 1-3 145 B. Kinds of delays and their remedies 1. Delay in performing the main obligations 4-15 146 2. Delay in performing other obligations 51 145 A. Preliminary remarks 1-3 145 B. Kinds of delays and their remedies 1. Delay in performing the main obligations 4-15 146 2. Delay in performing other obligations 4-15 146 2. Delay in performing other obligations 4-15 3. Delays due to exonerating events 17-22 147 A. Introduction 51 Introduction						ance	5
VI. TRANSFER OF TECHNOLOGY A. Preliminary remarks 1 122 B. Kinds of delays and their remedies 1. Delay in performing the main obligations 4-15 146 2. The price 7-10 123 2. Delay in performing other obligations 4. Retransfer of technology 11-13 123 2. Delay in performing other obligations 4. Retransfer of technology 11-13 123 2. Delay in performing other obligations 4-15 146 147 148 149 1		C.	Consequences of the transfer	139-140	122		
VI. Transfer of technology A. Preliminary remarks 1 122 B. Object of the transfer of technology 1. Object of the obligation 2-6 122 2. The price 7-10 123 3. Further transfer of technology 11-13 123 4. Retransfer of technology 14 123 2. Delay in performing other obligations 16 147 4. Retransfer of technology 14 123 3. Delays due to exonerating events 17-22 147						[A/CN.9/WG.V/WP.4/Add.4]	
VI. TRANSFER OF TECHNOLOGY A. Preliminary remarks 1 122 B. Kinds of delays and their remedies 1 123 1 124 B. Kinds of delays and their remedies 1 125 1 126 B. Kinds of delays and their remedies 1 126 1 126 1 126 1 127 1 128	[A/CN.	9/W	G.V/WP.4/Add.2]			XI. DELAYS AND REMEDIES	
A. Preliminary remarks 1 122 B. Object of the transfer of technology 1. Object of the obligation 2-6 122 2. The price 7-10 123 3. Further transfer of technology 11-13 123 4. Retransfer of technology 14 123 C. Ownership of the technology to be transfered 15-18 123 D. Confidentiality 19-26 124 E. Infringement 27-37 125 VII. QUALITY A. Quality in works contracts 38-40 126 B. Stipulation of quality 41-45 126 1. Workmanship and material 46-47 126 B. Kinds of delays and their remedies 1. Delay in performing the main obligations 4-15 146 2. Delay in performing other obligations 16 147 4. Lot 3. Delays due to exonerating events 17-22 147 XII. DAMAGES AND LIMITATION OF LIABILITY A. Introduction 23-24 147 B. Exclusion of unforeseeable damage 25-28 148 C. Exclusion of indirect or consequential loss and anticipated profits 29-31 148 D. Reduction in damages in case of failure to mitigate loss 32-35 148 E. Stipulation of limited amount of	VI.	TRA	ANSFER OF TECHNOLOGY				5
B. Object of the transfer of technology 1. Object of the obligation				1	122	·	_
1. Object of the obligation 2-6 122 2. Delay in performing other obligations 3. Further transfer of technology 11-13 123 123 124 2. Delay in performing other obligations 16 147 147 148 149 149 159 149 159 149 159 1						<u>-</u>	
2. The price 7-10 123 2. Delay in performing other obligations 16 147 3. Further transfer of technology 11-13 123 16 147 4. Retransfer of technology 14 123 3. Delays due to exonerating events 17-22 147 C. Ownership of the technology to be transfered 15-18 123 XII. DAMAGES AND LIMITATION OF LIABILITY A. Introduction 23-24 147 D. Confidentiality 19-26 124 B. Exclusion of unforeseeable damage 25-28 148 VII. QUALITY 29-31 148 A. Quality in works contracts 38-40 126 D. Reduction in damages in case of failure to mitigate loss 29-31 148 D. Reduction of limited amount of 32-35 148				2-6	122		6
3. Further transfer of technology 11-13 123 23 24 24 25 25 24 25 26 24 25 26 26 26 26 26 26 26			,			T =	•
4. Retransfer of technology			•			1	7
C. Ownership of the technology to be transfered							
Transfered 15-18 123 23 23-24 147		C.					
D. Confidentiality 19-26 124 E. Infringement 27-37 125 VII. QUALITY A. Quality in works contracts 38-40 126 B. Stipulation of quality 41-45 126 1. Workmanship and material 46-47 126 E. Infringement 23-24 147 B. Exclusion of unforeseeable damage 25-28 148 C. Exclusion of indirect or consequential loss and anticipated profits 29-31 148 D. Reduction in damages in case of failure to mitigate loss 32-35 148 E. Stipulation of limited amount of		٥.		15-18	123	i ·	_
E. Infringement		·D					
VII. QUALITY A. Quality in works contracts			•			I	8
A. Quality in works contracts	••		*			•	_
B. Stipulation of quality	VII.	-		40.10			8
1. Workmanship and material 46-47 126 E. Stipulation of limited amount of							_
		В.					8
2. Performance of the plant			-			I	_
			2. Performance of the plant	48-30	127	1 damages 36-42 149	y

		Po	aragraphs	Page				,	Paragraphs	Page
	F.	Exclusion of damages caused by				В.	Defects o	luring production		Ū
	г.	defects of materials provided or design				В,		oval of defects	75-81	168
		stipulated by the purchaser	43-45	149				ension of the work	82-85	169
	C	Exclusion of personal injury and	45.45	.,,		~	-		86-95	169
	u.	damage to property not being the						t taking-over		
			46-52	150		D.		luring the guaranty period	96-102	171
		subject-matter of the contract	40-32	150		E.	_	nent of notice		
r. (C) r	A 288.	C 11/33/D 4/4 11 81						gation to notify and form of	100 105	151
[A/CN.	9/ W	G.V/WP.4/Add.5]						ce	103-107	171
XIII.	Exc	DNERATION						re to notify	108-109	172
	A.	Introduction	1-4	151				remedy defects	110-117	172
	В.	Exonerating circumstances				G.	Defects a	fter guaranty period	118	173
		1. "Force majeure" clauses in con-								
		tractual stipulations	5-7	151	[A/CN.	.9/W	G.V/WP.	4/Add./]		
		2. ECE 188A and ECE 574A	8-11	152	XVII.	TER	RMINATION			
		3. FIDIC-CEC	12-14	152		A.	General	remarks	1-2	173
		4. FIDIC-EMW	15-17	152		В.	Grounds	for termination		
		5. UNIDO model contracts (CRC,					1. Brea	ch of contract	3-27	173
		TKL and STC)	18	153				nerating circumstances	28-33	175
		6. Sales Convention	19-21	153				er grounds for termination	34-41	175
		7. ICC "force majeure" clause	22-25	153		C.		r termination and procedure		
	C.	Notification				٠.		lowed	42-56	176
	٠.	1. Duty to notify	26-32	154		D.		ences of termination	57-61	177
		2. Failure to notify	33-38	155			-	ch of contract	62-75	177
	D	Consequences of exoneration	00 00					nerating circumstances	76-83	179
	D.	1. Effects contemplated by parties in		;				er grounds for termination	84-86	181
		contractual stipulations	39	155			J. Om	or grounds for termination	04 00	101
		2. ECE 188A and ECE 574A	40	156	XVIII.	AP	PLICABLE L			
		3. FIDIC-CEC	41-42	156		Α.		remarks	87-88	181
		4. FIDIC-EMW	43-45	156	l	В.	Choice o	f applicable law	89-94	181
		5. UNIDO model contracts (CRC,	45-45	150		C.	Addition	nal legal regulations		
		TKL and STC)	46	157			1. Adn	ninistrative and other munici-		
		· · · · · · · · · · · · · · · · · · ·	47	157			pal l	aws	95-100	181
		6. Sales Convention	48	157			2. Noti	ification of law applicable to		
		7. ICC "force majeure" clause	40	137			the	works	101-105	182
XIV.	RE	NEGOTIATION				D.	Subsequ	ent changes in the laws	106-110	183
	Α.	General remarks	49-53	158			-	-		
	В.	Renegotiation in event of "force								
		majeure"	54	158						
		1. Contractual stipulations	55-59	158	İ					
		2. UNIDO model contracts (CRC,								
		TKL and STC)	60-63	159				Part three		
		3. ICC "force majeure" clause	64	159	IA/CN	0/3	G.V/WP	4/A44 81		
	C.	Renegotiation in hardship situations			[A/CIV	. 2/ 11				
	-	1. Contractual stipulations	65-75	160	List of questions for possible consi		uestions for possible consider	ation		
		2. UNIDO model contracts (CRC,						by the Working Group		
		TKL and STC)	76	162		Α.	Introdu	ction	1-3	183
		3. ICC "suggested hardship clause"	77-79	162	ì	В.		questions	• •	100
]	D .	Specific I.		:	
[A/CN	[,9/W	/G.V/WP.4/Add.6]					1.	documents		184
•					1		II.			184
XV.		JARANTIES	1.0	1.62			III.	Erection		184
	Α.		1-3	163				Passing of risk		184
	В.	· · · · · · · · · · · · · · · · · · ·	4-5	163			v.	-		185
		1. Extent of guaranty	6-13	163				Transfer of property		185
		2. Exceptions	14-18	164			VI.	Transfer of technology		
		3. Period of guaranty	19-38	164			VII.	Quality		185 186
		4. Content of guaranty	39-54	165			VIII.	Inspection and tests		186
		5. Procedure for claims	55-57	167			IX.	Completion		186
		6. Limitation of or exemption from			1		Х.	Take-over and acceptance		186
		liability	58-60	167	1		XI.	•		186
	C.	Performance guaranty			i		XII.	~		
		1. Extent of guaranty	61-66	167	1			liability		186
		2. Demonstration	67	167	ŀ		XIII.	Exoneration		187
		3. Content of guaranty	68-72	167			XIV.	Renegotiation		187
					1		XV.	Guaranties		188
XVI	. Rı	ECTIFICATION OF DEFECTS			1		XVI.	Rectification of defects		188
	A	. Meaning of "defect" in works con-			1		XVII.	Termination		188
		tract	73-74	168	I		XVIII.	Applicable law	. 158-162	189

Part one

[A/CN.9/WG.V/WP.4*]

Introduction

- 1. The Working Group on the New International Economic Order at its session held in New York in January 1980 recommended to the Commission for possible inclusion in its work programme, *inter alia*:
 - "4. Harmonization, unification and review of contractual provisions commonly occurring in international contracts in the field of industrial development such as contracts on research and development, consulting, engineering, supply and construction of large industrial works (including turn-key contracts or contrats produits en main), transfer of technology (including licensing), service and maintenance, technical assistance, leasing, joint venture, and industrial co-operation in general."
- 2. The Working Group was of the opinion that this item would be of special importance to developing countries and to the work of the Commission in the context of the new international economic order. The Group therefore requested the Secretariat to prepare a study on this item and submit it to the Commission at its thirteenth session. That study² reviewed the various types of contracts used in the context of industrialization, described their main characteristics and content and referred to the work carried out in this field by other organizations.
- 3. The Commission, at its thirteenth session, welcomed the recommendations of the Working Group concerning subject-matters to be included in the work programme of the Commission and agreed to accord priority to work related to contracts in the field of industrial development.³
- 4. In considering the various different types of contracts set forth in the study of the Secretary-General, there was wide agreement in the Commission to commence work on contractual provisions relating to contracts for the supply and construction of large industrial works and contracts on industrial co-operation in general. It was noted that these contracts were of a complex nature and included elements found also in other types of contract. It was thought that these contracts would, therefore, form a basis for possible future work in respect of other related contracts. It was

also felt that the elaboration of model clauses, model contracts or model rules in regard to the supply of large industrial works was a logical sequence to the law of sales.⁴

- 5. The Commission, therefore, requested the Secretary-General to carry out preparatory work in respect of contracts on the supply and construction of large industrial works and on industrial co-operation.⁵ The present study is submitted in compliance with that request.
- 6. It was generally agreed that the Secretariat in carrying out the preparatory work should have a certain measure of discretion.⁶ The Commission endorsed the suggestion by the Secretariat that its work should comprise studies of the available literature and the relevant work of other organizations and should analyse international contract practices. It was noted that the work of the Secretariat would be facilitated if members of the Commission provided the Secretariat with copies of such contracts.⁷
- 7. The Secretariat is not yet in a position to base its study on an analysis of actual contracts except in a few instances. The collection of contracts in the field of industrialization which the Secretariat has at its disposal is so far too limited to permit substantial conclusions. The Secretariat, however, based its findings on the study of general conditions, model forms of contract and available relevant literature.

A. Work done by other international organizations

1. Conditions and models under study

- 8. The present study took into account, in particular, the following documents:
- (a) General Conditions for the Supply and Erection of Plant and Machinery for Import and Export, No. 188A and 574A prepared by the United Nations Economic Commission for Europe (ECE), referred to as the ECE General Conditions or as ECE 188A/574A;
- (b) Guide on Drawing up Contracts for Large Industrial Works (ECE/TRADE/117), referred to as the ECE Guide;
- (c) Conditions of Contract (International) for Electrical and Mechanical Works (including Erection on Site)

^{* 21} April 1981.

¹ A/CN.9/176, para. 31 (Yearbook . . . 1980, part two, V, A).

² A/CN.9/191 (Yearbook . . . 1980, part two, V, B).

³ Report of UNCITRAL on the work of its thirteenth session, Official Records of the General Assembly, Thirty-fifth Session, Supplement No. 17 (A/35/17), para. 143 (Yearbook . . . 1980, part one, II. A).

⁴ *Ibid.*, para. 136.

 ⁵ Ibid., para. 143.
 6 Ibid., para. 141.

⁷ Ibid., para. 139. By a note-verbale dated 31 October 1980 the Secretary-General solicited the member States of the Commission to provide copies of such contracts and other relevant materials assuring to keep confidential all materials that are of a confidential nature when received. At the time of the preparation of this study, only an industrialized State communicated its willingness to provide the Secretariat with such materials in the near future.

with Forms of Tender and Agreement prepared by the Fédération Internationale des Ingénieurs-Conseils (FIDIC), second edition 1980, referred to as FIDIC-EMW; and,

- (d) Conditions of Contract (International) for Works of Civil Engineering Construction with Forms of Tender and Agreement also prepared by the FIDIC, third edition 1977, referred to as FIDIC-CEC.
- 9. In addition to those general conditions which are intended for use in international commercial relations, the present study took into account the work of the United Nations Industrial Development Organization (UNIDO) which is engaged in drafting model contracts for the fertilizer industry. The relevant documents are:
- (a) Second Draft of the UNIDO Model Form of Turn-key Lump-Sum Contract for the Construction of a Fertilizer Plant (ID/WG.318/1), referred to as UNIDO-TKL;
- (b) First Draft of the UNIDO Model Form of the Semi-Turn-key Contract for the Construction of a Fertilizer Plant (ID/WG.318/2), referred to as UNIDO-STC;
- (c) Third Draft of the UNIDO Model Form of Cost Reimbursable Contract for the Construction of a Fertilizer Plant (ID/WG.318/3), referred to as UNIDO-CRC;
- (d) Consolidated Comments upon the Second Draft of the UNIDO Model Form of Turn-key Contract for the Construction of a Fertilizer Plant (ID/WG.318/4), referred to as comments; and,
- (e) Alternative Draft to the Third Draft of the UNIDO Model Form of Cost Reimbursable Contract for the Construction of a Fertilizer Plant (ID/WG.318/5), referred to as counter-proposal.

2. Work of UNIDO

- 10. The Second Consultation Meeting on the Fertilizer Industry at Innsbruck, Austria, 6-10 November 1978, reviewed a Preliminary Draft of the UNIDO Model Form of Cost-Reimbursable Contract for the Construction of a Fertilizer Plant (ID/WG.281/12). This meeting also discussed the preparation of other UNIDO model forms of contract for the construction of a fertilizer plant (ID/WG.281/2).8
- 11. An Expert Group Meeting on UNIDO Model Forms of Contract for Fertilizer Plants was held at Vienna, Austria, 26-30 November 1979. To this meeting the following documents were submitted:
- (a) Second Draft of the UNIDO Model Form of Cost Reimbursable Contract for the Construction of a Fertilizer Plant (ID/WG.306/1);
- ⁸ Report of the Second Consultation Meeting on the Fertilizer Industry (ID/221).

- (b) First Draft of the UNIDO Model Form of Turnkey Lump-Sum Contract for the Construction of a Fertilizer Plant (ID/WG.306/2).
- 12. After that Expert Group Meeting the UNIDO Secretariat prepared further drafts (ID/WG.318/1-3, see paragraph 10, supra). Some members of the Expert Group, representatives of contractors from France, Germany, Federal Republic of, Japan, United Kingdom and the United States of America, referred to in this study as an international group of contractors, prepared their consolidated comments upon the Second Draft of the UNIDO Model Form of Turn-key Contract and their Alternative Draft to the UNIDO Model Form of Cost Reimbursable Contract (ID/WG.318/4-5, see paragraph 10, supra).
- 13. These UNIDO documents were submitted to the Third Consultation on the Fertilizer Industry at São Paulo, Brazil, 29 September-2 October 1980, but only part of the UNIDO-TKL model contract was discussed. Therefore, another Expert Group Meeting on Model Contracts for the Construction of a Fertilizer Plant took place at Vienna, Austria, 23 February-6 March 1981, which considered the UNIDO-TKL and UNIDO-CRC models. Another meeting will be held 13-16 April 1981 and it is hoped that these two models will be finalized at the meeting. The UNIDO-STC model and another model on know-how and transfer of technology are expected to be ready by the end of the year.

3. Work of ECE

- 14. The ECE has published several sets of general conditions for contracts on supply and construction of large industrial works.¹⁰ Among them only ECE 188A and 574A, prepared in 1957, have been taken into account, because it was felt that they are representative of approaches undertaken by ECE.
- 15. The differences between ECE 188A and ECE 574A are marginal. They relate mainly to the formulation of the exonerating circumstances and to the settlement of disputes by arbitration. These differences have their origin in the elaboration of the General Conditions No. 188 by West European countries in 1953 and their later revision in an East-West context in 1955 which led to the adoption of No. 574.
- 16. The ECE General Conditions relate to a contract which may be called a semi-turn-key contract. They do not relate to any particular branch of industry and are in general oriented on the model of relations between parties from developed countries.

4. Work of FIDIC

17. The FIDIC Conditions have been drafted separately for civil engineering works and for electrical and

⁹ ID/260, paras. 49-56.

¹⁰ See A/CN.9/191, para. 47 (Yearbook . . . 1980, part two, V, B).

mechanical works. The latter relate more or less to all branches of industry. In both cases it is assumed that the purchaser will retain the services of an engineer as his agent, but that the engineer will nevertheless act fairly between the contractor and the purchaser.

18. The FIDIC Conditions are aimed at holding a fair and reasonable balance between the requirements and interests of the parties concerned. The two sets of FIDIC Conditions (see paragraph 8, supra) were inadvertently omitted in the study on international contracts in the field of industrial development (see footnote 2, supra).

B. Aim and scope of the study

1. Aim of the study

- 19. The present study aims mainly at identifying legal issues in contracts on the supply and construction of large industrial works (referred to as "works contracts"). For each topic the study attempts to describe the main characteristics, examines and compares the provisions contained in the various forms under study (see paragraphs 8 and 9, *supra*) and comments on them where appropriate.
- 20. The analysis of the various forms under study is not exhaustive. This is because the purpose of the analysis is not to evaluate existing models as such but to identify legal issues on which the Commission might usefully undertake work without necessarily duplicating the efforts of other organizations. It does not matter, therefore, that the UNIDO model contracts are still in draft form or that all the forms under study have been prepared for different types of contracts, for specific sectors of industry or for an industry in general.
- 21. It is to be noted that our study proceeds mainly with an examination and comparison of similar provisions on a given issue found in the various forms under study. Of necessity, these provisions have to be isolated from their context. However, no value judgment is intended when comparisons are made as each provision has to be evaluated in its own context. Where a provision appears to favour one party, there might be other provisions which favour the other party. And it has to be borne in mind that all provisions can be more or less counter-balanced by the price.

2. Contract on supply and construction of large industrial works: a definition

22. In a previous study the contract on supply and construction of large industrial works has been defined as a "comprehensive contract between the client [the purchaser] and one contractor (supplier) only. This contract comprises all the various aspects of such a

transaction: design, drawings, documentation, delivery, assembly, building, installation, putting into operation, demonstration tests, controls, initial operation of the plant and taking-over. Thus the main characteristic of this contract is its comprehensive nature and complexity."

- 23. This comprehensive contract, in a pure form, would be a turn-key contract. However, for various economic, financial and technical reasons, not all purchasers favour the turn-key concept.
- 24. Often, the purchaser participates in the construction of the plant (e.g. in the provision of the necessary connexion for power and water and supply of materials). Very often the purchaser provides all civil engineering work including the construction of buildings; he may also provide the personnel for the assembly, erection, testing and start-up of the plant.¹² Through such participation by the purchaser, the contract becomes a semi-turn-key contract.
- 25. The purchaser in a turn-key, and more often in a semi-turn-key, situation may make use of a consulting engineer. The involvement of such an engineer, however, does not change the contract into a tripartite transaction: the engineer is acting on behalf of the purchaser.
- 26. Where the engineer represents the supplier's side, he himself becomes the contractor, who will be responsible for the procurement of all necessary supplies and services. In this situation a cost reimbursable contract will usually be concluded.
- 27. These are only the main types of contract on supply and construction of large industrial works. Various industries require to a certain extent different approaches (e.g. see part two, XV, Guaranties). A chemical plant is different from a rolling mill, and a machine-tool factory is different from a textile mill. The division of labour and the responsibility between the contractor and the purchaser may be different according to their specific purposes.
- 3. Legal nature of a contract on supply and construction of large industrial works
- 28. While it may not always be easy to distinguish between a contract for work on goods where the contractor also provides the materials and a contract for sale of goods yet to be produced, contracts on supply and construction of large industrial works are clearly distinct from contracts for the sale of goods.¹³ Nevertheless, contracts for the supply and construction of large industrial works have some common features with contracts

12 *Ibid.*, para. 42.

¹¹ A/CN.9/191, para. 40 (Yearbook . . . 1980, part two, V, B).

¹³ International Encyclopedia of Comparative Law, vol. VIII, Specific Contracts, chapter 8, "Contracts for Work on Goods and Building Contracts" Tübingen, J. C. B. Mohr (Paul Siebeck, 1980), pp. 3 et seq.

for sale of goods as a part of the obligation of the contractor is to deliver a plant or equipment.

- 29. Article 3 of the United Nations Convention on Contracts for the International Sale of Goods, concluded at Vienna in April 1980* (A/CONF.97/18, hereinafter referred to as Sales Convention), provides that contracts for the supply of goods, to be manufactured or produced, are to be considered sales. There are, however, two important exceptions.
- 30. The contract is not a sales contract if the party who orders the goods undertakes to supply a substantial part of the materials necessary for such manufacture or production. Except for a pure turn-key contract, in the sphere of manufacture of plants, a supply of materials by the purchaser is quite frequent.
- 31. The contract is also not a sales contract if the preponderant part of the obligation of the party who furnishes the goods consists in the supply of labour or other services and the "delivery" of the project, the transfer of technology, the erection of the plant, and the putting into operation are supplies of labour and other services.
- 32. However, the Sales Convention may become applicable in such situations where a contractor and a purchaser conclude a series of separate contracts, e.g. for the supply of equipment, licensing or assembly.
- 33. Even though the Sales Convention may not be applicable to all works contracts, nonetheless, reference is made to it as it may provide the analogy on how related issues in a works contract may be solved.
- 34. The study did not, however, look into any national law. It has already been observed that most national legislations do not contain provisions relating specifically to contracts for supply and construction of large industrial works.¹⁴ Most provisions which courts would apply are not of a mandatory nature. As far as mandatory rules are concerned, the Secretariat was unable to obtain them.

4. Scope of study

- 35. Part two of this study examines clauses which relate to the following:
 - I. Drawings and descriptive documents
 - II. Supply
 - III. Erection
 - IV. Passing of risk
 - V. Transfer of property
 - VI. Transfer of technology
 - VII. Quality
 - * Yearbook . . . 1980, part three, I, B.
 - ¹⁴ A/CN.9/191, para. 46 (Yearbook . . . 1980, part two, V, B).

- VIII. Inspection and tests
 - IX. Completion
 - X. Take-over and acceptance
 - XI. Delays and remedies
 - XII. Damages and limitation of liability
- XIII. Exoneration
- XIV. Renegotiation
- XV. Guaranties
- XVI. Rectification of defects
- XVII. Termination
- XVIII. Applicable law
- 36. The subjects which are not included in part two and on which the Secretariat intends to carry on its preparatory work for the next session of the Working Group are, *inter alia*, the following:
- (a) formation of contract; (b) definitions; (c) subcontractors; (d) assignment; (e) performance bonds; (f) insurance; (g) price calculation; (h) price revision; (i) invoicing; (j) payment conditions; (k) currency and rates of exchange; (l) storage on site; (m) liaison agents; (n) personnel and additional labour; (o) training; (p) taxes and custom duties; (q) settlement of disputes; (r) language of the contract; and, (s) interpretation of the contract.
- 37. Part three contains some questions which the Working Group may wish to discuss in addition to the general questions for future work as described below.

5. Terms and notions

38. In the various forms under study and also in those contracts in the Secretariat's collection, the names of parties in a works contract have been variously described. Thus, "contractor" is also referred to as "erector", "holder of contract", "client's contracting party", "vendor", "supplier" or "seller" (provided "supplier" and "seller" are not defined in a contract as denoting a third party as in a cost reimbursable contract). "Purchaser" is also referred to as "client", "customer", "buyer" or "employer". However, throughout our study, the parties to a works contract shall be referred to as "contractor" and "purchaser".

C. Future work

39. In its suggestion for possible work to be done by UNCITRAL, the previous study suggested the following courses of action open to the Commission: (a) to consider widening the scope of the General Conditions prepared by ECE; (b) to prepare new general conditions; (c) to prepare a model contract form for transactions in the field of industrial plants in general; (d) to deal with

certain specific clauses of such contracts; and (e) to consider the desirability of a draft convention on international contracts for the supply and construction of large industrial works. 15

- 40. At the same time, however, it was also suggested that any decision on the direction the work should take and the ultimate end product should be taken in stages on the basis of progress made in the course of preliminary work.16 This was confirmed by the Commission at its thirteenth session.17
- 41. However, some general direction of work would have to be agreed. In this connexion, in view of the importance given by the Commission to the legal aspects of contracts for the supply and construction of large industrial works, the Working Group might wish to consider whether the preparation of a legal guide in order to assist parties in the negotiation of contracts might be adequate as a preliminary objective.
- Certainly there are in existence several guides or guidelines such as those prepared by ECE and UNIDO.¹⁸ The ECE Guide, however, addresses itself to enterprises in Europe. Moreover, this Guide is rather brief and general and does not discuss all the legal issues in depth. The various UNIDO documents, on the other hand, deal mainly with economic, technical, administrative and financial aspects of the installation of large industrial works.
- 43. It appears desirable to have a more comprehensive legal guide which, inter alia, identifies the legal issues to be kept in mind when negotiating and drafting contracts on industrial works, describes various approaches pointing out the advantages and disadvantages of each approach and suggests alternative solutions.
- 44. As work progresses, the contents for inclusion in such a guide may become clearer and a stage may be reached when a model clause approach would be feasible in the context of some clauses. The work may also reveal that a uniform law approach would be appropriate in the light of conflicting national rules as regards other legal issues involved (e.g. in a manner similar to the project currently undertaken by the Working Group on International Contract Practices on liquidated damages and penalty clauses). The examination may further reveal that the preparation of UNCITRAL definitions on some contract terms might be desirable because of the frequent use of legal shorthand in the drafting of contracts—confusion as to their meanings is likely to ensue particularly when parties to an international contract belong to a different legal system or where trade practices differ,

15 A/CN.9/191, paras. 52-55 (Yearbook . . . 1980, part two, V, B).

16

¹⁸ A/CN.9/191, paras. 48 and 50 (Yearbook . . . 1980, part two, V, B).

(i.e. a similar consideration which prompted the International Chamber of Commerce to adopt INCOTERMS in order to eliminate such difficulties. 19

- The process of identifying the proper formula for end products on distinct legal issues and the implementation may very well progress in parallel with the preparation of guidelines. As the work develops, the scope of each area (e.g. types of contract to be covered) would also become clearer. In fact, such process in stages would be essential in order to attain a meaningful guide designed to contribute to the establishment of a new international economic order in a pragmatic manner. And, only after such processes, a more ambitious approach may become more feasible.20
- 46. Whatever the future decision may be, it appears indispensable first to analyse all relevant issues in depth on each concrete legal issue involved, taking into account the interest of both parties and the need for equitable and balanced solutions. Keeping these considerations in mind, this preliminary study has been prepared to assist the deliberations of the Working Group.²¹

Part two

[A/CN.9/WG.V/WP.4/Add.1*]

I. Drawings and descriptive documents

A. Preliminary remarks

1. Throughout the various phases of a contract for the construction of large industrial works, a number of documents are issued by the parties in order to determine the scope of the work to be performed, to follow up on its performance and to enable the purchaser to operate the plant. These documents may consist of catalogues,

19 The ECE General Conditions do not contain a distinct provision on definitions. The FIDIC Conditions and the UNIDO model contract contain many definitions but they are often different from one another.

²⁰ Since contracts for supply and construction of large industrial works are frequently concluded on the basis of public tenders, it has been suggested that drafting of procurement regulations with contract conditions may be a useful and promising approach for UNCITRAL. As the work progresses to a mature stage, such an undertaking may also become a relatively easy task.

21 Since a future decision would ultimately have to be taken by the Commission, the Working Group may also wish to note that a report of the Secretary-General (A/CN.9/203) (reproduced in this volume, part two, V, B), which will be before the fourteenth session of the Commission, has discussed, inter alia, future courses of action which are open for the Commission.

Ibid., para. 148. 17 Report of the United Nations Commission on International Trade Law on the work of its thirteenth session (A/35/17), para. 141 (Yearbook . . . 1980, part one, II, A).

²⁶ May 1981.