

36. One observer suggested that the subject-matter of products liability be included in the list of proposed items. It was noted that the Secretariat had submitted a detailed study on this subject to the Commission but that the Commission had decided not to allocate priority to the item. However, the Commission, at its tenth session, had agreed to reconsider its decision if a State member of the Commission made a proposal to that effect. The observer therefore withdrew his proposal and reserved the right to suggest this item to the Commission at a future session.

Co-ordination

37. In accordance with the terms of reference given to it by the Commission the Working Group considered the question of co-ordination of work of organizations. Though it was realized that the problems which arose in this respect were of an identical nature in the area of international trade law in general and the area of the new international economic order in particular, it was generally agreed that the Commission should give particular attention to the need for co-ordination in respect of legal work relevant to the new international economic order by reason of the fact that the General Assembly had requested all United Nations organs and bodies to contribute to the establishment of a new international economic order. Therefore, the danger of duplication of efforts and work was much greater in the latter area.

38. The Working Group heard statements by the Secretary of the Commission and by the observers of the United Nations Conference on Trade and Development and the Centre for Transnational Corporations regarding the experience of the secretariats they represent in respect of co-ordination and possible steps that could be taken.

39. The Working Group was of the view that the present report should set forth the various suggestions that were made in the course of the discussions and agreed to suggest to the Commission that it should include in the agenda of its forthcoming session an item entitled "co-ordination of work". In that connexion the Working Group wishes to place the following considerations before the Commission:

(a) It is in the first instance the duty of Governments represented in United Nations bodies to exercise control over the programmes of work of these bodies and in particular to ensure that in drawing up those programmes work programmes already existing should be taken into account. In this respect attention was drawn to the usefulness of the reports on the work of other organizations in the field of international trade law which the Secretary-Gen-

eral submitted to the annual sessions of the Commission. The suggestion was made that such reports would gain in usefulness if they contained more detailed information on the scope of subject matters dealt with by these organizations and on the progress made in respect of them. It was further suggested that the Secretariat of the Commission should submit detailed reports in respect of a given subject matter similar to the report submitted to the twelfth session of the Commission regarding transport law;

(b) There should be a greater co-operation between the secretariats of the United Nations bodies concerned, in particular between those serving the Commission, the United Nations Conference on Trade and Development, the United Nations Industrial Development Organization, the Centre for Transnational Corporations and the Committee for Natural Resources. Such co-operation could be achieved by periodic meetings between the heads of the secretariats involved. Furthermore, in areas where this was relevant, the secretariat of a United Nations body dealing with a given subject related to any subject on which certain results had already been achieved by another United Nations body, should inform its body of those results. In this connexion, reference was made to the successful work of the Commission in the area of international commercial arbitration and the desirability that other United Nations bodies should be informed of that work whenever, in their own work, the question of settlement of disputes arose;

(c) It was noted that under General Assembly resolution 34/142* the Secretary-General had been requested to take effective steps to secure a close co-ordination, especially between those parts of the Secretariat which are serving UNCITRAL, the International Law Commission, UNCTAD, UNIDO, and the Commission on Transnational Corporations. The view was expressed that there might well be an urgent need for a more rational approach by the United Nations to the legislative work of its various organs;

(d) Thought was also given to the feasibility of regular meetings of chairmen of commissions and committees.

40. While it was recognized that the Commission could not claim sole competence in all areas of international trade law the Working Group was of the view that the Commission was fully competent to co-ordinate work of other bodies in areas where it had itself carried out substantive work. Reference was made in particular to the area of international commercial arbitration.

41. The Working Group adopted this report unanimously.

* Reproduced in this volume, part one, I, C, above.

B. Study by the Secretary-General: international contracts in the field of industrial development (A/CN.9/191)*

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),

* 16 May 1980.

service and maintenance, technical assistance, leasing, joint venture, and industrial co-operation in general.”¹

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 next session so that the Commission may take its decisions in full knowledge of the issues involved.

3. The present study is submitted in compliance with this request. It reviews the various types of contracts used in the context of industrialization, describes their main characteristics and content and refers to the work done by other organizations and bodies. There are also submitted, for the Commission’s consideration, suggestions in respect of future work in the field at issue.

A. Review of contract types used in the context of industrialization

I. CONTRACT ON RESEARCH AND DEVELOPMENT

1. *Main characteristics and contents*

4. Technological research and development is mainly carried out by and with industrial enterprises for their own needs and purposes. If the result of such research is transferred to others it is usually done under a contract on the transfer of technology.²

5. Research and development may be carried out by industrial enterprises or by research institutes for the benefit of and at the request of other users. In such a case the research work is usually carried out under a research contract.

6. Whereas a contract on the transfer of technology presupposes the existence of a particular technology or other pertinent know-how, a contract on research has as its main characteristic not the transfer but the search for new technology.

7. The notion “research” is used in different contexts:

(a) “Fundamental research”: research aimed at increasing the scope of science and technology without knowing at the time of the research how the result of such research could be applied (also called “scientific research”);

(b) “Applied research”: research aimed at developing innovative techniques which could consist of a patentable invention or of know-how;

(c) “Research—development”: the purpose is to use and develop the result of fundamental or applied research;

(d) “Industrial research”: the conducting of practical experimental investigations at laboratory and pilot plant levels and the provision of technical advisory services for specific practical industrial objectives.

All these different kinds of research could also be the subject of an international research contract.

¹ A/CN.9/176, para. 31 (reproduced as A, above).

² See *infra*, paras. 56 *et seq.*

8. Contracts on research and development are found as separate contracts and as a component part of other types of contract. Single research contracts may have as their object product development, process improvement or development, material research and development, as well as applied research and development by means of laboratory experiments, or by the use of a pilot plant.

9. In combination with other types of contract, research and development might be an element of a consulting contract³ or of a contract on supply and construction of large industrial works.⁴ Joint research and development may be found in contracts on industrial co-operation.⁵ The most common combination, however, is the inclusion of clauses on patents and licensing in the research contract or of clauses on research in a licence contract.⁶

10. By a research contract one party (the researcher) undertakes to obtain a specified result or to carry out specified research and development and to convey the result of his work to the other party (the client). The client is obliged to pay remuneration.

11. One characteristic of a research contract is that its object cannot be described in detail because the research is dealing with uncertain, still unknown matters which are not easily determinable. Since the purpose of the research is to obtain new knowledge as yet not existent and available there is always the risk that there might be no solution to the problem to be solved. A detailed description of the research project or the purposes of the research and the limitation, if not exclusion, of the responsibility of the researcher for the result of the work are therefore important features of a contract on research and development.

2. *Existing legislation*

12. The contract on research and development is generally not treated as a contract *sui generis* in national legislation. Courts usually apply provisions relating to traditional types of private law contracts such as the contract on the supply of labour and other services. As far as problems of liability and warranty are concerned courts tend to distinguish work contracts in general and contracts on research in particular.⁷

13. Recently the German Democratic Republic enacted special legislation on international commercial contracts including the contract on scientific technical services (article 82 *et seq.*, International Commercial Contracts Act [ICCA] of 5 February 1976) which is aimed at governing contracts on research and development. In the ICCA the contract on scientific technical services is treated as a sub-type of the contract on the carrying out of work.

³ See *infra*, paras. 17 *et seq.*

⁴ See *infra*, paras. 39 *et seq.*

⁵ See *infra*, paras. 106 *et seq.*

⁶ See *infra*, para. 57.

⁷ See for instance the French and Belgian court practice referred to by Yves Reboul: “Garantie de résultat et contrat de recherche”, pp. 99 *et seq.* in “Garantie de résultat et transfert de technique”, Montpellier 1977.

3. Work done by other international organizations and bodies

14. In view of the importance of research and development for the industrialization of developing countries UNIDO has for many years dealt with industrial research. Examples are the following booklets:

Industrial Research Institutes (ID/30)
 Industrial Research (ID/40/10)
 Industrial Research Institutes (ID/70)
 Industrial Research Institutes (ID/161)

These publications are mainly concerned with project selection and evaluation and with the financial administration of industrial research. Only exceptionally do these publications touch on legal issues arising in the context of the drawing up of contracts on research and development between an industrial research institute and a client.⁸

15. Valuable work in this field is also carried out by the World Association of Industrial and Technological Research Organizations (WAITRO).⁹ WAITRO at present has 75 members located all over the world.¹⁰ WAITRO has developed training programmes and deals with co-operation between research and development organizations. It is not concerned with the legal regulation of research contracts.

4. Possible work to be done by UNCITRAL

16. Before considering the desirability of uniform legal rules for contracts on research and development the Commission may first wish to elaborate a guide for drawing up such contracts. Such a guide¹¹ could deal, *inter alia*, with questions concerning:

Purpose of the contract
 Description of the object of the research
 Obligations of the researcher
 Guarantees for results
 Effectiveness
 Intellectual property rights in research results
 Transfer of results
 Relations to third parties (and third party rights)
 Secrecy
 Limitation of liability
 Obligations of the client
 Costs and payments
 Force majeure and changed circumstances
 Revision of contract and adaptation to new conditions
 Termination and rescission
 Applicable law
 Arbitration

⁸ See ID/30, chapter 10 and annex 3.

⁹ See report of the founding meeting, ID/62.

¹⁰ See the statement by the Secretary-General of WAITRO at UNIDO III in New Delhi.

¹¹ For existing guides see *infra*, paras. 48, 68, 103 and 136.

II. CONSULTING CONTRACT

1. Main characteristics and contents

17. The term "consulting" is used in different contexts. In the field of industrialization, the term is mainly used in relation to "consulting engineering", which comprises design study, preliminary designs and design drawings, project reports, cost estimates (so-called basic engineering), submission of proposals for definitive design, detailed design study, architectural design, structural design, construction design, dimensioning calculations, technical specifications setting out the work to be accomplished, goods and services to be supplied, maintenance required etc. (so-called detailed engineering) as well as predesign, design and after-design services (so-called complete engineering).¹²

18. Besides consulting engineering, consulting services could also relate to economic services, management services or training services.¹³

19. Consulting services relating to an industrial investment project are sometimes not only referred to as consulting engineering but also as autonomous or "pure" engineering as distinguished from complex engineering or engineering in general.¹⁴ The first type is dealt with in this study as the subject of a consulting contract, while the latter type is treated as the subject of an engineering contract.¹⁵

20. The contents of a consulting contract are intellectual services rendered by the consultant for agreed fees to be paid by the client. In contrast to a research contract the scope of the services as well as their content and objective can be described in detail.

21. Essential elements in consulting contracts are, *inter alia*:

Scope of assignment (definition of the scope in successive phases, specification of various services)
 Obligations of the consultant: providing professional help, services and information (work schedule to be maintained, personnel to be supplied, amount of authority the consultant is to have vis-à-vis third parties)
 Obligations of the client, information to be supplied to the consultant, services and personnel to be provided by the client
 Copyright and ownership of documents: designs, blueprints
 Financial arrangements, method of payment (types of fee, currency) for each successive stage of the project
 Guarantee of performance
 Liability of the consultant
 Consequences of default, remedies
 Settlement of disputes

¹² See detailed description of consulting engineering services in TRADE/GE.1/R.21, paragraphs 11 *et seq.*

¹³ See contract on technical assistance, *infra*, paras. 79 *et seq.*

¹⁴ See TRADE/GE.1/R.21, paragraph 8.

¹⁵ See *infra*, paras. 29-38.

2. Existing legislation

22. The consulting contract does not appear to be treated as a contract *sui generis* in any legislation. Courts in various countries seem to apply private law rules governing work contracts or service contracts. In the German Democratic Republic the provisions on the contract on scientific technical services¹⁶ are also applied to consulting contracts.

3. Work done by other international organizations and bodies

23. Uniform rules on consulting contracts have been elaborated by the International Federation of Consulting Engineers (FIDIC):¹⁷

International Model Form of Agreement between Client and Consulting Engineering and International General Rules of Agreement between Client and Consulting Engineer for Pre-Investment Studies (IGRA 1979, P. I.)

International Model Form of Agreement between Client and Consulting Engineering and International General Rules of Agreement between Client and Consulting Engineer for Design and Supervision of Construction of Works (IGRA 1979 D + S)

24. Furthermore FIDIC has published

Guide to the Use of Independent Consultants for Engineering Services

and

Guidelines for *ad hoc* Collaboration Agreements between Consulting Firms

25. The FIDIC rules were drawn up by a body representing consultants. However, another model of Contract for Consultants' Services exists drawn up by a body acting in the capacity of a client, i.e. by the World Bank acting as Participating and Executing Agency of the United Nations Development Programme/Special Fund.¹⁸

26. To provide a balance between the interests of consultants on the one hand and clients on the other hand the Economic Commission for Europe (ECE) has recently commenced work on consulting contracts. A Group of Experts on International Contract Practices in Industry, which has already prepared several guides for drawing up international contracts,¹⁹ decided to prepare a guide on drawing up international contracts on consulting engineering, including related aspects of technical assistance, which should cover, *inter alia*, the following topics:²⁰

Legal characteristics of consulting engineering contract

Applicable technical standards

Commencement and completion of consulting services

Procedures of delivery and acceptance of documents

Completeness of documents

Obligations of the parties

¹⁶ See *supra*, para. 13.

¹⁷ See also *infra*, para. 34.

¹⁸ See *Guidelines for Contracting for Industrial Projects in Developing Countries*, ID/149, p. 78.

¹⁹ See *infra*, paras. 48, 68, 103 and 136.

²⁰ See report of the fifteenth session, TRADE/GE.1/43.

Responsibilities of the engineering firm

Responsibilities of the client

Total cost of the project

Amount and methods of remuneration of the engineering firm

Ownership of documents

Repeated use of the design

Secrecy

Protection of the client by the engineering firm from any claims for infringement of patent and other proprietary rights

Settlement of disputes

Damages sustained by either party

Alteration of the contract

Suspension of the contract

Termination of the contract

Law governing the contract

27. UNIDO is concerned with the use of consultants,²¹ and with the promotion and strengthening of national industrial consultancy capabilities,²² but has dealt with consulting contracts more from a technical and economic than a legal point of view.²³

4. Possible work to be done by UNCITRAL

28. As the ECE has already begun to deal with the legal aspects of international consulting contracts, the Commission may wish to wait for the result of this work to avoid duplication of efforts. After the publication of the ECE Guide the Commission might wish to consider the desirability of preparing General Conditions or uniform rules for consulting contracts.

III. ENGINEERING CONTRACT

1. Main characteristics and contents

29. The engineering contract, as distinguished from the consulting contract, covers all project operations, i.e. intellectual services *plus* supply of equipment and civil and construction works.²⁴ In contrast to consulting engineering this is also called complex engineering or engineering in general. Complex engineering comprises preliminary studies, planning, design, construction, training and co-ordination services including technical assistance, testing and putting into operation.

30. The engineering contract is distinguished from the contract on the supply and construction of large industrial works. Despite some similarity in that the latter contract is concluded between the supplier or contractor and the client, as is the engineering contract between the engineering firm and the client, the engineering contract is no substitute for the contract on the supply and construction of large industrial works but supplementary to separate contracts with suppliers of equipment and services.

²¹ See *Manual on the Use of Consultants in Developing Countries*, ID/3/Rev.1.

²² See UNIDO/EX.89/Rev.1.

²³ See chapter III. Contract between owner and consultants, in ID/149.

²⁴ See TRADE/GE.1/R.21, paragraph 8.

31. Apart from the elements of consulting and, perhaps, industrial research, the engineering contract has as its main characteristic the element of agency, because the engineering firm is acting on behalf of the client and negotiating and concluding contracts with different suppliers of machinery and other equipment as well as contracts with suppliers for various services and with the process licensor. (The characteristics of an engineering contract are not altered if the client concludes some of the necessary contracts, for instance with the licensor, himself.)

32. The content of an engineering contract is partially the same as that described in regard to contracts on research and development and the consulting contract. Additional elements comprise especially the responsibility in regard to the procurements of all major equipment, the supervisory responsibility of the engineering firm and its liability in regard to the acts and omissions of the suppliers and other contractors towards the client.

2. Existing legislation

33. The engineering contract is not treated as a contract *sui generis* in any national legislation. The several aspects of this contract are governed by provisions on work contracts and service contracts, including provisions for agency contracts.

3. Work done by other international organizations and bodies

34. FIDIC has published an International Model Form of Agreement between Client and Consulting Engineer and International General Rules of Agreement between Client and Consulting Engineer for Project Management (IGRA 1980 PM). Here the engineering firm is called the project manager who performs his services for and on behalf of the client.

35. UNIDO has dealt with engineering contracts in the framework of the transfer of technology. Its Guidelines for evaluation of transfer of technology agreements contain a chapter on the engineering services agreement.²⁵

36. Another project of UNIDO for an engineering contract is the preparation of a "Model Form of Cost Reimbursable Contract for the Construction of a Fertilizer Plant".²⁶ In this model the engineering firm acts as a project manager who procures all necessary equipment for and on behalf of the client from qualified suppliers. The content of this model is similar to another UNIDO model of a turn-key contract²⁷ except for the question of liability and direct payment. The Model Form of Cost Reimbursable Contract for the Construction of a Fertilizer Plant will be submitted to the Third Consultation on the Fertilizer Industry (scheduled for September–October 1980) for adoption.

37. In the context of preparing rules for industrial investment projects the ECE has drafted certain provisions for engineering contracts:

Additional Clauses for Supervision of Erection of Plant and Machinery Abroad.²⁸

4. Possible work to be done by UNCITRAL

38. As the work done by FIDIC is considered as the work of a non-governmental international organization representing mainly the interest of one of the parties only, and as the present work of UNIDO is confined to a particular branch of industry, the Commission may wish to consider the desirability of commencing work on engineering contracts, either by drafting a guide on drawing up international engineering contracts or by drafting general conditions for engineering contracts, taking into account the results achieved within the framework of other organizations.

IV. CONTRACT ON SUPPLY AND CONSTRUCTION OF LARGE INDUSTRIAL WORKS

1. Main characteristics and contents

39. A client who wishes to construct an industrial plant may proceed in different ways. If he chooses to deal with various contractors for the various parts of a plant or with the suppliers of equipment and know-how separately, then the whole transaction is split up into several contracts such as a consulting contract, a licensing contract, various sales contracts for machinery and equipment, a work contract for the erection of the plant etc. All these contracts together do not amount to a contract on supply and construction of large industrial works.

40. The contract on supply and construction of large industrial works is a comprehensive contract between the client 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.

41. Which, and how many, supplies and services the contractor does not provide himself but by subcontracting is irrelevant. Towards the client the contractor alone is entirely responsible.

42. The comprehensive nature of the contract does not mean, however, that the contractor is responsible for all the necessary steps of supply and construction. Usually the client participates in the construction of the plant. He provides the site for the complex, the necessary connection for power, water etc., as well as the necessary local permits and authorizations. He also provides all the necessary data and such parts of the materials which he may procure locally. Very often the client provides all civil engineering work including the construction of buildings. For the assembly and erection and for the testing and start-up of the plant the client provides the necessary personnel.

²⁵ See ID/233, p. 27.

²⁶ ID/WG.281/12, plus Add. 1: see also the third draft of 31 January 1980, ID/WG.318/3.

²⁷ See *infra*, para. 49.

²⁸ See ECE Publications, Nos. 188 E and 574 B.

43. The contract on supply and construction of large industrial works, therefore, is usually a contract which provides for a division of labour between the contractor and the client, where the responsibility of the contractor is limited in so far as the client himself is responsible for certain parts and operations.

44. If in such a comprehensive contract the contractor has the obligation to deliver an operational industrial complex to the client without active participation of the client in the various stages of the construction, the contract is called a turn-key contract (or *contrat clé-en-main*). Over and above the various aspects described earlier, the contractor must also provide for technical assistance with respect to training, operate the plant for a short initial period and assist with the marketing of the products manufactured.

45. If the contract imposes on the contractor an additional guarantee as to the quantity and the quality of the production over a longer period of time (sometimes up to two years) the "*contrat clé-en-main*" will become "*contrat produit-en-main*". It seems that there does not yet exist a widespread use of this type of contract.

2. Existing legislation

46. Except for the International Commercial Contracts Act of the German Democratic Republic which contains a section entitled "Erection of Plant",²⁹ national legislations do not contain provisions relating specifically to contracts for supply and construction of large industrial works, much less the "*contrat clé-en-main*" or the "*contrat produit-en-main*". One must therefore refer to the many aspects of the law of contracts involved: contracts for services, contracts for supply of labour, licensing contracts, contracts for sale etc. it may be thought that the application of various legal provisions of different types of contract to a contract like the one for supply and construction of large industrial works is not adequate to its comprehensive nature.

3. Work done by other international organizations and bodies

47. The ECE has published several sets of general conditions for contracts on supply and construction of large industrial works:³⁰

General conditions for the supply of plant and machinery for export, Nos. 188 + 574

General conditions for the supply and erection of plant and machinery for import and export, Nos. 188 A + 574 A

These general conditions were drafted between 1953 and 1963 before the advent of the complex and sophisticated type of contracts which are found today. Accordingly, they do not take into account the intricate relationship existing between the parties in the light of the recent developments in this field. Besides, these general conditions were oriented on the model of relations between parties both from developed countries.

²⁹ See articles 88-97 of the ICCA.

³⁰ See also the Additional clauses for supervision of erection of plant and machinery abroad (188 B + 574 B) mentioned *supra*, para. 37. Further, the ECE has elaborated General conditions for the erection of plant and machinery abroad (188 D + 574 D).

48. The ECE has also published various guides, among them the "Guide on Drawing up Contracts for Large Industrial Works".³¹ This guide lists the various contractual procedures which may be adopted for such works, indicating the problems which such procedures may raise and the consequences which they may entail.

49. UNIDO is in the process of preparing a "Model Form of Turn-key Lump Sum Contract for the Construction of a Fertilizer Plant".³² This draft model form of contract will be submitted to the Third Consultation on the Fertilizer Industry in September-October 1980.³³

50. UNIDO has dealt repeatedly with various aspects of the installation of large industrial works, especially from the point of view of economic, technical, administrative and—most important—financial considerations. Examples are:

Programming and Control of Implementation of Industrial Projects in Developing Countries³⁴

A Guide to Industrial Purchasing³⁵

Manual on Investment-Promotion Centres³⁶

Contract Planning and Organization³⁷

Subcontracting for Modernizing Economies³⁸

Guidelines for Contracting for Industrial Projects in Developing Countries³⁹

Guidelines for the Establishment of Industrial Estates in Developing Countries⁴⁰

4. Possible work to be done by UNCITRAL

51. If the Commission considers the contract on supply and construction of large industrial works to be of sufficient importance to justify the commencement of work on it, there may be several courses of action open to the Commission.

52. The General Conditions prepared by ECE focus on East-West relations. The Commission could therefore consider widening the scope of these general conditions or prepare new general conditions to be included in the new types of contract used more and more frequently between developed and developing countries.

53. Since UNIDO has prepared model contracts in a special field (fertilizer production), the question arises whether such models should be prepared for each branch (or even sub-branch) of industry or whether UNCITRAL should consider preparing a model contract form for such transactions in general.

54. Another possibility would be that UNCITRAL pay special attention to certain specific clauses of these contracts (for instance clauses on liability, on guarantees, on applicable law, on settlement of disputes).

³¹ ECE/TRADE/117.

³² See ID/WG.306/2 and a second draft of 31 January 1980, ID/WG.318/1.

³³ See also *supra*, para. 36.

³⁴ ID/SER.L/1.

³⁵ ID/82.

³⁶ ID/102.

³⁷ ID/117.

³⁸ ID/129.

³⁹ ID/149.

⁴⁰ ID/220.

55. Finally, after the successful conclusion of the work on the international sale of goods, the Commission may wish to consider the desirability of a draft convention on international contracts for the supply and construction of large industrial works.

V. CONTRACT ON TRANSFER OF TECHNOLOGY

1. Main characteristics and contents

56. Transfer of technology takes place in various forms—organized or incidentally, against or without payment, on the basis of separate contracts or in the framework of other, more comprehensive contracts. This study deals with contracts on the transfer of technology in their pure form as licensing contracts.

57. Licensing contracts can relate to protected or unprotected know-how. In either case the objective of the contract is the transfer of technology, i.e. the granting of the use of scientific or scientific-technical results, whether they are protected by intellectual (or industrial) property rights or not.⁴¹

58. The differences between patent licensing and know-how licensing contracts touch upon the liability of the licensor, third party rights, the duration of the contract etc. The obligations of the parties in regard to the supply of information and documentation, the granting of further licences by the licensor or of sublicences by the licensee and other aspects are basically the same in both patent and know-how licence contracts.

59. The main characteristic of a licensing contract is the sale of knowledge, i.e. the supply of incorporeal goods from the licensor to the licensee and the right to use such knowledge by the licensee. As far as the knowledge is protected by intellectual property rights these rights are usually limited to a certain territory.

60. Besides the distinction between patent and know-how licensing, international practice has developed various subtypes of licensing contracts, *inter alia*:

Exclusive and non-exclusive licensing

Licensing with a single or continuing transfer of knowledge

Licensing of inventions or innovations

Production or development licensing

61. For the payment of the licence fees (the price of the knowledge supplied, and for the right to use it) two main forms have been developed which in contract practice appear alone or in combination: the payment of a fixed price—a lump sum—or the payment of an amount calculated on the basis of a fixed percentage share of the production or sale of products by the licensee (a royalty).

2. Existing legislation

62. Many countries have special laws on industrial property rights which are basically not concerned with, but sometimes contain provisions on, licensing. Furthermore in

many countries—especially developing countries—there exist special legal provisions concerning administrative matters or transfer of technology policy. These laws are concerned with registration and the control and authorization of contracts on transfer of technology, and have to that extent an impact on the obligations of the parties. However, they do not regulate the licensing contract as such.

63. The licensing contract, as a relatively new type of contract, is not regulated as a contract *sui generis* in most legislations. Courts apply provisions on lease or rent when the licensing contract grants the right to use the transferred technology. The ICCA of the German Democratic Republic⁴² contains a special section on licensing contracts.

3. Work done by other international organizations and bodies

64. Contracts on transfer of technology have already been considered by many international organizations. The subject is of principal interest to the World Intellectual Property Organization (WIPO) which has published *inter alia* a "Licensing Guide for Developing Countries" dealing with the legal aspects of the negotiation and preparation of industrial property licences and technology transfer agreements appropriate to the needs of developing countries.

65. After preliminary work by the United Nations Conference on Trade and Development (UNCTAD), a special United Nations Conference on an International Code of Conduct on the Transfer of Technology has been convened which has held two sessions in 1978 and 1979. It is expected that the Code will be completed at a third session in 1980. The Code will cover most of the aspects of a licensing contract.

66. UNIDO has also given considerable attention to contracts on the transfer of technology and has dealt not only with the commercial and technical but also with the legal aspects thereof. It has published "Guidelines for the acquisition of foreign technology in developing countries, with special reference to technology licence agreements".⁴³

67. Recently UNIDO has published a series of studies on development and transfer of technology, for instance:

No. 1 National approaches to the acquisition of technology, containing a chapter on terms of licence agreements^{43a}

No. 12 Guidelines for evaluation of transfer of technology agreements^{43b}

68. ECE has published a "Guide for use in drawing up contracts relating to the international transfer of know-how in the engineering industry",⁴⁴ and is currently preparing a "Manual on licensing procedures and related aspects of technology transfer", containing chapters covering the position in each of 19 ECE member countries.

⁴² Articles 176-186.

⁴³ ID/98.

^{43a} ID/187.

^{43b} ID/233.

⁴⁴ TRADE/222/Rev.1.

⁴¹ Licensing of industrial property rights can also relate to trade marks, but this is not the transfer of technology itself and will not be dealt with here.

69. A non-governmental regional organization, the Organisme de Liaison des Industries Métalliques Européennes (ORGALIME), has elaborated a "Model form of Patent Licence Agreement with a foreign company".

4. Possible work to be done by UNCITRAL

70. In view of the fact that WIPO is a specialized agency within the United Nations system with special competence in this area, and that there is already a considerable amount of work done by this and other organizations, the Commission may wish to conclude that it would be inappropriate to start work in this field.

VI. CONTRACT ON SERVICE AND MAINTENANCE

1. Main characteristics and contents

71. There are several types of contracts on service and maintenance, differing in their nature and objectives. Two principal types are:

(a) Contract between manufacturer (seller) and client (purchaser);

(b) Contract between manufacturer (seller) and specialized servicing firm.

72. The first type of contract is concluded for the maintenance and repair of industrial plant, aeroplanes or other sophisticated equipment, if the purchaser (operator) does not himself have enough skilled technicians for this purpose. The second type of contract is concluded for the maintenance and repair of technical consumer goods like cars, television sets etc.

73. In a contract on service and maintenance between a manufacturer and a purchaser the manufacturer undertakes to provide the services of skilled maintenance technicians on a continuous basis, maintain the necessary maintenance test gear in good working order, carry out routine preventive maintenance, ensure that adequate stocks of spare parts are available at all times and train the purchaser's staff in maintenance techniques.⁴⁵

74. In a contract on service and maintenance between a manufacturer and a specialized servicing firm the servicing firm undertakes to carry out all necessary repairs and maintenance services for the goods sold by the manufacturer in a certain area both within the guarantee period stipulated by the seller and after the expiry of that period.

75. A third type of contract, also called a service contract, is concluded between national oil companies and foreign firms capable of providing the needed capital and technical expertise. Under such a service contract (also called a work contract, operations contract, association contract, or production-sharing contract) the foreign firm undertakes the actual search for, development, and at times even the marketing of the oil resources.⁴⁶

⁴⁵ See requirements for maintenance, operation and spare parts, in *Contract Planning and Organization*, ID/117, p. 38.

⁴⁶ Hasan S. Zakariya, "New directions in the search for and development of petroleum resources in the developing countries", *Vanderbilt Journal of Transnational Law*, vol. 9 (1976), pp. 545 *et seq.*

2. Existing legislation

76. On the first type, which is the most interesting in the context of industrialization, no special legal regulations are known. It is assumed that this contract is treated as a mixed contract consisting of work, service and sale. The second type is included in the ICCA of the German Democratic Republic.⁴⁷ The third type is sometimes governed by agreements between States and foreign enterprises and are occasionally treated as quasi-public international law agreements.

3. Work done by other international organizations and bodies

77. The Council for Mutual Economic Assistance (CMEA) has elaborated "General Conditions for the Technical Servicing of Machinery, Equipment and other Items delivered between Foreign Trade Organizations of Member Countries of the Council for Mutual Economic Assistance".⁴⁸

4. Possible work to be done by UNCITRAL

78. Since the maintenance of modern plant and equipment is a major problem for developing countries, and work on the regulation of contracts on service and maintenance has not been undertaken by other organizations, the Commission may wish to include this type of contract in its work programme. The final form that the work should take could be decided at a later stage after initial studies of the problems involved.

VII. CONTRACT ON TECHNICAL ASSISTANCE

1. Main characteristics and contents

79. The phrase "technical assistance" is sometimes used in a broad sense to cover any of the contractual relationships dealt with in this report. In a narrow sense, however, two types of contract are named technical assistance contracts: the contract for training of personnel and the management contract.

80. In a contract for training of personnel the services of the supplier consist in the training of the client's personnel in production operations, maintenance, marketing, accounting etc.⁴⁹ Such training extends over a certain period of time and may take place in the supplier's country, in the client's country or even in a third country in an already operating plant.

81. Contracts on training of personnel specify the number of people to be trained, the objective of the training (the scope of the instruction), the duration of the training, the necessary level of education, the place, the living conditions (either for the people to be trained in the supplier's country or for the instructors in the client's country), the remuneration for supplier's services etc.⁵⁰

⁴⁷ Articles 129-136.

⁴⁸ *Register of Texts of Conventions and other Instruments concerning International Trade Law*, vol. I, New York 1971, pp. 31-38.

⁴⁹ See the technical assistance agreement, in *Guidelines for Evaluation of Transfer of Technology Agreements*, ID/233, pp. 5 *et seq.*

⁵⁰ Compare, for instance, "Conditions for the provision of technical personnel abroad", prepared by ORGALIME, in *Guidelines for Contracting for Industrial Projects in Developing Countries*, ID/149, p. 167.

82. One possible way of obtaining technical services is to employ the supplier's personnel in key positions and then have them train local personnel—operators, salesmen and managers—so that, over the agreement period, the local personnel acquires all the supplier's expertise.⁵¹

83. The management contract also has as its ultimate goal the training of personnel of the client, but its immediate purpose is to start up the plant, stabilize its operations and keep it running. It is a contract under which operational control of the enterprise (or of part of it) is vested in a separate enterprise which performs the necessary managerial functions in return for a fee.⁵² The management contract is sometimes considered as an alternative to conventional direct investment.

2. Existing legislation

84. Special legal rules of a private law nature for contracts on technical assistance are unknown.

85. Intergovernmental agreements which the USSR has concluded with Algeria, with Egypt, with Guinea, with Iraq, with Sri Lanka and with Syria contain General Terms of technical assistance.⁵³

3. Work done by other international organizations and bodies

86. The contract on technical assistance has so far not been the subject of extensive work by any organization. A few legal aspects are covered in UNIDO's "Guidelines for Evaluation of Transfer of Technology Agreements".⁵⁴

4. Possible work to be done by UNCITRAL

87. Since technical assistance contracts play an important role in the field of industrial development⁵⁵ the Commission may consider it worthwhile to start work on this subject, especially with regard to all aspects of the training of personnel. Account could be taken of existing national⁵⁶ and international⁵⁷ general conditions for contracts on technical assistance.

VIII. LEASING CONTRACT

1. Main characteristics and contents

88. There are many forms of leasing contracts. However, the leasing contracts of special importance in the context of industrial development appear to be maintenance leasing and financial leasing.

89. Under a "maintenance" or "operating" lease, the owner of goods (e.g. machinery, plant or equipment)

⁵¹ ID/233, p. 6.

⁵² Peter P. Gabriel, *The International Transfer of Corporate Skills, Management Contracts in Less Developed Countries*, Boston 1967, p. 22.

⁵³ "Legal aspects of industrial co-operation between the Soviet Union and other CMEA member countries and the developing countries", *Contracts between Organizations and Firms*, ID/WG.229/7, p. 16.

⁵⁴ ID/233, p. 7.

⁵⁵ See "The acquisition and development of industrial skills by developing countries", Report for the Third General Conference of UNIDO, ID/CONF.4/8.

⁵⁶ See for instance Mahoumed Salem, "Les contrats d'assistance techniques", in *Transfert de technologie et développement*, Paris 1977, p. 467.

⁵⁷ See *supra*, para. 85.

grants the use of the goods to the other contracting party, who would pay the owner money for such use. The term of the lease is normally for less than the effective life of the goods leased (i.e. at the end of the lease, the owner could lease the goods again, or use them in some other way). The duty of keeping the goods in good repair during the lease normally falls on the owner. While the rights and duties of the parties *inter se* are determined by the terms of a written contract between them, the framework of the contract usually approximates to that of the contract of hiring known to most legal systems.

90. A "financial" lease is usually entered into under the following circumstances. A prospective user wishes to buy goods or have their use for their effective life, but does not have the money to pay the supplier for them. After agreeing with the supplier the nature and specifications of the goods required, the prospective user arranges for the necessary financing with a financier. The arrangement takes the form of a purchase of the goods by the financier from the supplier, with a subsequent leasing of the goods to the user, the ownership remaining with the financier. Under the lease, the lessee has to make periodic payments to the lessor, and the amount of the payments are so calculated that, upon completion, they reimburse the lessor-financier for the purchase price he has paid, together with his costs and interest on the price. Furthermore, upon completion of the payments, the lessee would usually have the option to purchase the goods, often for a nominal consideration. The consideration will be nominal because, in effect, the user has fully paid for the goods, and also because the effective life of the goods often has expired. Other possibilities which may be stipulated for on the completion of the lease are that the lessee has the option to enter into a new lease, or may return the goods to the lessor.

91. "Financial" leasing is therefore normally a tripartite transaction which enables the supplier to sell his goods, the financier to profit by his financing, and the lessee to get the use of the goods on financial terms which he can afford. Occasionally, however, a supplier with sufficient funds may himself finance the leasing of his own equipment.

2. Existing legislation

92. "Maintenance" leasing is well known to most legal systems, and special legislation often exists to balance the rights and duties of the parties in an equitable manner. A few countries have special legislation regulating "financial" leasing.⁵⁸ In some countries, revenue laws which determine the tax obligations of the parties to leasing transactions also influence the terms to be contained in such transactions.

3. Work done by other international organizations and bodies

93. The International Institute for the Unification of Private Law (UNIDROIT) is in the course of preparing uniform rules for financial leasing.⁵⁹

⁵⁸ E.g. for France, see the law No. 66-455 of 2 July 1966 modified by the ordinance No. 67-837 of 28 September 1967.

⁵⁹ See the preparatory report by its Secretariat, Study LIX-Doc.1 (March 1975) and the draft uniform rules, Study LIX-Doc.8 (January 1979).

94. UNIDO has proposed the use of financial leasing at an international level to facilitate the acquisition of plant and equipment for purposes of industrial development by developing countries from developed countries.⁶⁰ Furthermore, a study on the advantages and disadvantages of "financial" leasing in respect of various types of equipment was presented to a Symposium on the Development of the Plastics Fabrication Industry in Latin America.⁶¹

95. Leasing was considered at the third Seminar on East-West Trade Promotion, Marketing and Business Contacts organized by the Committee on the Development of Trade of the ECE (13-15 May 1975). The view was expressed that leasing could play an important role in the framework of East-West industrial co-operation. The conclusion of the participants in the Seminar was that "leasing companies and manufacturers engaged directly in leasing, should provide more information on the entire subject ranging from costs, advantages, disadvantages, legal aspects, and services to information on finance rental systems and methods. This might best be done by governments in the form of official publications to avoid conflict of competitive interest".⁶²

4. Possible work to be done by UNCITRAL

96. In view of the wide variety in the subject-matter of "maintenance" leases, the formulation of uniform rules to govern such contracts does not appear to be practicable. The work undertaken by UNIDROIT on the formulation of draft uniform rules to govern "financial" leasing of a purely commercial character is at an advanced stage, and it is desirable that the completion of this work should be left to UNIDROIT. If the work by UNIDO on the promotion of "financial" leasing for development purposes were to proceed further, the Commission may wish to consider the possibility of contributing to the legal aspects of such work (e.g. the formulation of model leasing contracts, or performance guarantees).

IX. JOINT-VENTURE CONTRACT

1. Main characteristics and contents

97. Joint ventures are increasingly used in international economic relations in general, including relations between countries having different socio-economic systems. In particular joint ventures are used as a means of direct foreign investment in developing countries. Joint ventures involve, in varying degrees, the pooling of assets, joint management and a sharing of profits and risks according to a commonly agreed formula.⁶³

98. The objectives of joint ventures may vary considerably: production, marketing, servicing etc., separately or in combination. Joint ventures are frequently used in the exploration and exploitation of natural resources.⁶⁴

⁶⁰ This proposal was submitted by the UNIDO Secretariat to an *ad hoc* Expert Group Meeting on Industrial Leasing of Industrial Plants in Developing Countries (Vienna, 29-30 May 1978).

⁶¹ Bogota, Colombia, 20 November-1 December 1972: document ID/WG.137/50.

⁶² *Licensing and Leasing*, TRADE/INF.2, paras. 43-58.

⁶³ TRADE/R.373, para. 70.

⁶⁴ *Permanent Sovereignty over Natural Resources*, E/C.7/99, paras. 20-35.

99. There are two fundamental forms of joint ventures, contractual joint ventures and equity joint ventures.⁶⁵ In the case of a contractual joint venture, no additional entity is established and no corporate entity is set up, the association being based entirely on a contract. In the case of an equity joint venture, a separate body corporate (incorporated mixed company) is established, in the equity capital of which both foreign and local parties have a share.

100. The contents of joint-venture contracts differ depending on the objective of a joint venture, and the form chosen. Essential elements are the percentage of the foreign ownership, the voting rights upon questions such as the appointment of directors, distribution of assets, changes in the objectives of the joint venture, changes in the capital structure etc. Many aspects have to be decided on the basis of the company laws of the host country.

2. Existing legislation

101. Many countries have special laws on various types of incorporated or unincorporated entities which apply independently of the question whether or not foreign parties have an interest in such entities. Special laws on joint ventures have been enacted in some countries recently, generally aimed at controlling, and sometimes aimed at attracting, foreign capital.⁶⁶ Such special regulations (including tax regulations), are more concerned with matters of economic policy and less with private law relations between the parties.

3. Work done by other international organizations and bodies

102. UNIDO has published a Manual on the Establishment of Industrial Joint-Venture Agreements in Developing Countries.⁶⁷ Some of the topics considered in this manual are ownership, capital structure, direction, management, marketing, financial policies, industrial property, technical assistance and know-how, settlement of disputes and partnership changes. In a number of instances legal clauses for implementing some of the approaches have been included.

103. ECE has published several case studies on joint ventures in East-West Relations. It has considered joint ventures in Western as well as in Eastern European countries.⁶⁸ ECE has also elaborated a "Guide for drawing up international contracts between parties associated for the purpose of executing a specific project",⁶⁹ a guide for drafting of consortia contracts, for groups with or without legal personality.

104. The International Chamber of Commerce (ICC) has published an "International Guide to Company Formation",⁷⁰ which deals also with joint ventures.

⁶⁵ *Manual on the Establishment of Industrial Joint-Venture Agreements in Developing Countries*, ID/68, p. 3.

⁶⁶ See, for instance, the law on joint ventures of the People's Republic of China, *Droit et pratique du commerce international*, vol. 5 (1979), p. 455.

⁶⁷ ID/68.

⁶⁸ *East-West Industrial Co-operation*, ECE/TRADE/132, paras. 152 *et seq.* and annex III.

⁶⁹ ECE/TRADE/131.

⁷⁰ Brochure 263, September 1970.

4. Possible work to be done by UNCITRAL

105. The research by UNIDO appears to show that it is impossible to find any joint venture that could be called typical or serve as a prototype for other agreements. The UNIDO manual speaks of the almost infinite number of combinations of possible terms and conditions within the context of a joint-venture arrangement.⁷¹ In view of this finding and taking into account the work already done, the Commission may wish to conclude that, for the time being, no work should be commenced on joint-venture contracts.

X. INDUSTRIAL CO-OPERATION CONTRACTS

1. Main characteristics and contents

106. The international industrial co-operation contract, which is a relatively new phenomenon in international economic relations, has a growing importance for the industrialization of developing countries and the international division of labour.

107. According to the experience gained and the views advanced so far, the subject of industrial co-operation can include the following:

Joint research and development of scientific-technical solutions or results

Rendering of scientific-technical services, or exchange of information

Licensing of patents or know-how, and other forms of transfer of technology and of technical experience with payment in products created with the technology transferred

Co-operation in the field of investments, especially supply and erection of industrial plants and the exploitation or development of natural resources

Co-operation in the field of production, including specialization of production, subcontracting

Joint marketing of the products of industrial co-operation

108. In spite of being widely used, the term industrial co-operation has not yet found an internationally recognized definition. In the context of the activities of the ECE a wide-ranging "working definition" has been developed according to which industrial co-operation denotes the economic relationships and activities arising from:

(a) Contracts extending over a number of years which go beyond the straightforward sale or purchase of goods and services to include a set of complementary or reciprocally matching operations (in production, development and transfer of technology, marketing etc.);

(b) Contracts which have been identified as industrial co-operation contracts by governments in bilateral or multilateral agreements.⁷²

109. Similarly the Conference on Security and Co-operation in Europe recognized that industrial co-operation covers a number of forms of economic relations which go beyond the framework of conventional trade. As

specific forms which might be useful for the development of industrial co-operation were mentioned: joint production and sale, specialization in production and sale, construction, adaptation and modernization of industrial plants, co-operation for the setting up of complete industrial installations with a view to thus obtaining part of the products from such installations, mixed companies, exchanges of "know-how", of technical information, of patents and licences, and joint industrial research within the framework of specific co-operation projects.⁷³

110. To distinguish between co-operation at the level of governments and at the level of enterprises, recent studies of UNIDO speak of "industrial enterprise co-operation". By this term is understood "a long-term and complex industrial interaction between a developing country and a foreign enterprise with matching mutual performances, with some institutionalizing of a community of interests in a specific project and with the existence of a lasting interest in co-operation".⁷⁴ The complexity of such transactions is seen in particular, in that "the sale of industrial equipment and technology has been extended to include technical assistance, design of industrial complexes, civil engineering and the organization of long-term interaction".⁷⁵

111. Most of the many definitions of industrial co-operation are formulated in economic terms, although some legal definitions also exist. Furthermore, many transactions have been concluded which are described as industrial co-operation agreements and contracts. An analysis of their contents shows that, although dealing with very different matters, the transactions contain special common features which distinguish them from other contracts. These special features are mainly the following:

(a) The complexity of the exchange of services and goods;

(b) The combination of preparatory organizing obligations for research and development, and for production, on the one hand, and duties for the actual performance of the exchange of goods and services on the other hand;

(c) The long duration of the relations between the parties;

(d) The community of interests between the parties;

(e) Very often, special methods for financing the operations.

112. The complexity of these transactions has economic as well as legal aspects. Of particular importance for developing countries are transactions on industrial co-operation which include whole complexes in industry or agriculture. Instances of such transactions are geological surveys and explorations, which go from research *via* design and engineering to supply and erection and include training and assistance in the management of industrial works.

⁷¹ Conference on Security and Co-operation in Europe: Final Act, 1 August 1975, *International Legal Materials*, vol. 14, No. 5, September 1975, p. 1302.

⁷² See *Methods and Mechanisms for International Industrial Enterprise Co-operation*, UNIDO/IOD. 325, p. 10.

⁷³ *Ibid.*, pp. 10-11.

⁷¹ ID/68, p. 1.

⁷² *Analytical Report on Industrial Co-operation among ECE Countries*, E/ECE/844 Rev.1, para. 3.

113. Co-operation in the areas of scientific technique and the transfer of technology has gained a certain independence. Transfer of technology, however, plays an increasingly important role in the context of the installation of industrial plants. Often special programmes of technical support are agreed in connexion with the supply of large industrial works. Sometimes even the main object of the contract appears to be the transfer of technology, while the sale of equipment appears to be accessory.

114. It is not surprising therefore that "complex engineering" is developing as a new form of co-operative relations. This complex or general engineering comprises all the necessary activities for the installation of a plant, "i.e. complete consulting engineering, carry out the civil works, deliver and assemble the plant and equipment, train the personnel of the client, and assist the latter in starting up and running-in the plant".⁷⁶ Such a contract becomes "co-operative" by the inclusion of the client as an active partner in many or all of the individual phases of the operation, and particularly by the use of special methods of financing the operation.

115. To a growing extent developing countries request the support of foreign enterprises in the training of technical and managerial personnel as well as of workers. The conclusion of separate contracts on the training of personnel in the framework of large co-operative transactions, either at the place where the plant is to be installed or in an already operating plant (in the buyer's country or in the supplier's country or even a third country) therefore becomes increasingly important.

116. In the contract "*produit-en-main*", moreover, assistance in commercial or economic management plays a major role. Here what is needed is not only the starting up of a plant and its transformation to permanent functioning, but its technical and economic management for a more or less lengthy period, the gradual transfer of the management to the client's personnel, and temporary assistance to be given to such personnel. For this purpose special management contracts are concluded within co-operative agreements, though for the most part in separate documents.

117. Another complex aspect is the *mutual* exchange of goods and/or services. Thus, a contract on the supply and erection of a large industrial plant on a turn-key basis where the customer has no other obligation than to pay the price is, without more, not an industrial co-operation contract. Also contracts on simple transfer of technology are not co-operation contracts. Although the "Guide on Drawing up International Contracts on Industrial Co-operation"⁷⁷ mentions that such contracts may contain certain elements of industrial co-operation, real co-operation starts at the stage when both parties have undertaken obligations beyond the payment of the price.

118. The complexity of industrial co-operation relates also to the legal framework involved. For a given transaction there can be one comprehensive contract, covering all elements and aspects of the transaction. Very often, however, for a single project there are several contracts,

which are more or less interrelated and interdependent and sometimes covered or embraced by a basic or frame contract. But whatever its contractual structure, industrial co-operation in its various aspects comprises traditional contracts like sales or work and labour, or service, or licence etc. These various elements may be combined in many different ways with sometimes the one and sometimes the other element dominating. But, in any event, through their combination into a new complex contract (or an interrelated series of contracts) the single elements lose to a certain extent their specific identity, and this has consequences for the performance of the parties and especially for possible remedies for breach of contract.

119. One of the characteristics of contracts on industrial co-operation already mentioned is the inclusion of obligations beyond the direct exchange of goods and services, i.e. the inclusion of obligations concerning the preparation or organization of research, development and production.

120. Because of the complexity and the long duration of industrial co-operation, such contracts contain clauses which are usually not found in simpler contracts. There is, firstly, the duty of the parties to co-operate in every respect, and to do everything possible to attain the common aim and purpose of the contract. The contract on industrial co-operation creates not only a certain community of interests, it also establishes (and is based on) a special mutual confidence which in turn increases the obligations of the parties in regard to their endeavours to prevent damage to the other party.

121. Secondly, industrial co-operation contracts usually contain clauses limiting the possibilities of termination, and excluding rescission altogether. In this connexion it has to be stressed that for industrial co-operation contracts change of circumstances is of special importance. The main question in cases of changed circumstances is, however, not the termination of the contract but the adoption of additional measures, the adaptation of the contract to the new conditions. Industrial co-operation creates a kind of interdependence between the parties which has to be protected and preserved by suitable terms and clauses.

122. Contracts on industrial co-operation therefore, as long-term contracts, very often contain clauses providing for a permanent or regular adaptation or revision of the contract according to possible changes of circumstances. Sometimes joint bodies are created whose task is to evaluate the performance of both sides continuously and to put forward suggestions for the improvement of the co-operation. Such joint bodies are frequently established if co-ordination of labour on site is involved.

123. The community of interests of the parties is reflected in special clauses regarding remedies for breach of contract often contained in industrial co-operation contracts. Usually compensation for loss is limited. Instead attention is chiefly directed to the interrelation between the numerous tasks and obligations of the parties, and the relationship between principal or basic and subsidiary or corollary obligations. The emphasis is on the endeavours of the parties to keep their co-operative transaction alive.

⁷⁶ *International Engineering Contracts including Related Aspects of Technical Assistance*, TRADE/GE.1/R.21, para. 73.

⁷⁷ ECE/TRADE/124.

124. Because of the community of interests involved in industrial co-operation, it can be stated that contracts for such co-operation border on association contracts. Contracts for the creation of consortia⁷⁸ are examples of especially intensive co-operation. A network of industrial co-operation could also eventually lead to, or could include, the creation of a joint venture.

125. Many industrial co-operation contracts contain special methods of financing the operations, as the traditional methods, including traditional conditions of payment and securities, do not suffice. Sometimes, the transaction would not be possible without such special methods of financing.

126. Included in the various forms of industrial co-operation are compensation or buy-back arrangements. Here one party, the contractor, supplies design and equipment, carries out or supervises the erection of the plant, transfers the necessary technical knowledge, assists in the commissioning or even management of the works whilst the client takes part in the construction and the erection of the plant and sells to the contractor part of the output of the production.

127. Such compensation contracts not only have financial aspects (e.g. as the plant is usually supplied on credit terms to the client the repayment of the credit is easier if the production of the plant can be used) but also technical and technological aspects. If the supplier of a plant agrees to buy back part of the production of this plant it is naturally in his own interest to supply an effective operating plant of high quality. The contractor in such a case will also do his best regarding the training of the personnel of the client. Compensation contracts therefore are often considered as granting an additional guarantee to the client.

2. Existing legislation

128. It would appear that no specific legal regulations exist in any country on industrial co-operation contracts considered as contracts *sui generis* of a complex character. Even for the various elements which such a contract might have like consulting, engineering, construction, erection, assembly, licensing, training etc. many countries do not have specific rules and provisions. Legislation in general lags behind the practice of international economic relations and what has been invented and developed in that area in the recent past.

129. To the extent that courts have to deal with international industrial co-operation contracts, they would apply rules intended to govern traditional types of contracts like sales, labour, service, lease, association etc.

130. In some countries, apart from private law, legal provisions exist in the fields of anti-trust law and taxation concerning industrial co-operation. In regard to *international* industrial co-operation some countries have rules on branches of enterprises located abroad, on transfer of profits or on investment incentives.

131. On the international level as well the situation is unsatisfactory. There are no international uniform legal rules on complex industrial co-operation contracts, or on their substantial and constituent parts. Occasionally bilateral intergovernmental agreements contain some general terms or provisions for contracts on industrial co-operation.

132. The question of the law applicable to an international industrial co-operation contract is especially important. If the parties themselves have chosen the law to be applied—and under most legal systems party autonomy permits them to do so—there is no difficulty. If, however, the parties have failed to agree or have forgotten to choose the law to be applied, the question becomes complicated, as no country has special provisions for the solution of conflict of laws in regard to international industrial co-operation contracts.

133. Under these conditions one possibility would be to split up the complex contract into its constituent parts and determine the applicable law according to general principles. Another possibility would be to search for the dominant element in the whole complex transaction, to find out which law has to be applied to this element, and then to apply this law to the whole contract.

3. Work done by other international organizations and bodies

134. Various international organizations have already done considerable work on international industrial co-operation contracts as a whole, and even more on their components.⁷⁹ Complex industrial co-operation contracts have been dealt with by the ECE, UNCTAD and UNIDO.

135. ECE has analysed existing intergovernmental agreements as well as enterprise-to-enterprise contracts in industrial co-operation. It also keeps a register of intergovernmental agreements.⁸⁰ As a regional organization ECE is mainly, but not exclusively, concerned with industrial co-operation between East and West Europe. In connexion with tripartite industrial co-operation it has analysed contracts between European and developing countries' enterprises.⁸¹ This work has been done by ECE and the Centre on Transnational Corporations in co-operation.

136. The most relevant work on international industrial co-operation contracts was the elaboration of a "Guide on Drawing Up International Contracts on Industrial Co-operation".⁸² This guide does not serve as a model contract but contains a compilation of problems arising in international industrial co-operation with relevant recommendations for possible solutions. This guide is in line with previous guides adopted by the ECE.⁸³ The areas covered by it are:

The different elements of industrial co-operation contracts

⁷⁸ See, for example, *Guide for Drawing Up International Contracts between Parties Associated for the Purpose of Executing a Specific Project*, ECE/TRADE/131.

⁷⁹ See *supra*, paras. 14, 23, 34, 47, 64, 77, 86, 93 and 102.

⁸⁰ TRADE/R.334/Rev.2 and E/ECE/844/Rev.1.

⁸¹ ECE/TRADE/132.

⁸² ECE/TRADE/124.

⁸³ See *supra*, paras. 48, 68 and 103.

Industrial co-operation affecting enterprises of third countries

Industrial co-operation agreements connected with the construction of large industrial works

Co-operation in the development of natural resources

General questions included in all international contracts in the field of industry (among them applicable law and settlement of disputes)

137. UNCTAD has considered mainly intergovernmental agreements and their role in promoting industrialization and trade.⁸⁴

138. UNIDO has analysed international industrial co-operation in the framework of intergovernmental agreements⁸⁵ but has also dealt with contracts at the level of enterprises. As a result of this work, several guidelines and manuals⁸⁶ on various aspects of industrial co-operation have been issued.

4. Possible work to be done by UNCITRAL

139. In view of the importance of international industrial co-operation and the lack of legal rules the Commission might decide to begin work on industrial co-operation contracts. Elements to be considered could possibly include:

Interdependence of the constituent parts of industrial co-operation complexes

Interdependence of the mutual obligations of the parties

Effects of non-fulfillment of parts of the contract on the matching obligations of the other party

Plurality and change of parties to a contract

Effects of *force majeure*

Effects of changed circumstances

Revision of contracts

Termination and rescission

Limitation of damages

Applicable law

Settlement of disputes

140. The results of the work of the Commission could take the form of model clauses for inclusion in contracts. Also conceivable would be the elaboration of general conditions on international industrial co-operation to be recommended for use by parties to such contracts.

B. Conclusions

1. Conclusions in regard to specific contracts

141. The survey in part A shows that international contracts relevant to the industrialization of developing countries have been dealt with by international organiza-

tions in different contexts. The Commission might wish therefore to begin work on such contracts which, in spite of their importance, have been more or less neglected in so far as their legal regulation is concerned.

142. It would appear that contract types, on which preliminary work would justifiably be undertaken are the following:

Contracts on research and development

Contracts on service and maintenance

Contracts on technical assistance

In regard to these contracts initial studies should be conducted and the conclusions of an analysis of international contract practice could flow into a guide for drawing up such contracts.

143. Contract types in respect of which preparatory work has already been undertaken by other organizations are:

Contracts on engineering

Contracts on supply and construction of large industrial works

Contracts on industrial co-operation

In respect of these contracts further studies of international contract practice is necessary with a view to considering, taking into account the results of the work of other organizations, whether general conditions or model contracts should be drawn up.

144. Contract types which are at present on the work programmes of other international organizations include:

Contracts on consulting

Contracts on transfer of technology

Contracts on leasing

In regard to these contracts it would appear advisable to await the outcome of the work currently in progress.

145. The Commission may wish to decide which of the contracts mentioned above⁸⁷ were particularly relevant and in respect of which work should commence.

2. Conclusions in regard to methods and instruments

146. It is suggested that work in regard to contracts chosen by the Commission for inclusion in its work programme should begin with studies of available literature and an analysis of international contract practice.

147. Studies conducted by the Secretariat—which could be assisted by a Study Group—could form the basis for consideration by the Working Group on the New International Economic Order or the Working Group on International Contract Practices.

148. Any decision on the direction the work should take and the ultimate end product should probably be taken in stages on the basis of progress made in the course of preliminary work.

⁸⁴ TD/B/C.2/179, also published as UNCTAD/ST/MD/12.

⁸⁵ See *supra*, para. 110.

⁸⁶ See *supra*, paras. 27, 35, 50, 66, 67, 86 and 102.

⁸⁷ *Supra*, paras. 142 and 143.