LEGAL ASPECTS OF TECHNOLOGY TRANSFER: CURRENT ACTIVITIES OF INTERNATIONAL ORGANIZATIONS WITHIN THE UNITED NATIONS SYSTEM

Report of the Secretary-General

CONTENTS

<table>
<thead>
<tr>
<th>Paragraphs</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1-2</td>
</tr>
<tr>
<td>I. CODES OF CONDUCT RELATING TO TECHNOLOGY TRANSFER</td>
<td>3-37</td>
</tr>
<tr>
<td>A. UNCTAD draft international code of conduct on the transfer of technology</td>
<td>3-32</td>
</tr>
<tr>
<td>1. Some major issues: areas of agreement or substantial agreement</td>
<td>8-23</td>
</tr>
<tr>
<td>(a) Some aspects of restrictive business practices</td>
<td>8-20</td>
</tr>
<tr>
<td>(b) Responsibilities and obligations of parties</td>
<td>21-22</td>
</tr>
<tr>
<td>(c) Legal form of the draft Code</td>
<td>23</td>
</tr>
<tr>
<td>2. Some outstanding issues</td>
<td>24-32</td>
</tr>
<tr>
<td>(a) Some aspects of restrictive business practices</td>
<td>24-26</td>
</tr>
<tr>
<td>(b) Criteria for application of restrictive business practices</td>
<td>27-29</td>
</tr>
<tr>
<td>(c) Confidentiality</td>
<td>30</td>
</tr>
<tr>
<td>(d) Definition of an &quot;international&quot; transfer of technology</td>
<td>31</td>
</tr>
<tr>
<td>(e) Applicable law and settlement of disputes</td>
<td>32</td>
</tr>
<tr>
<td>Paragraphs</td>
<td>Page</td>
</tr>
<tr>
<td>------------</td>
<td>------</td>
</tr>
<tr>
<td>B. UNCTC draft code of conduct on transnational corporations</td>
<td>33-37 11</td>
</tr>
<tr>
<td>II. DECLARATION OF PRINCIPLES AND RULES ON RESTRICTIVE BUSINESS PRACTICES</td>
<td>38 13</td>
</tr>
<tr>
<td>III. UNCTAD DRAFT MODEL LAW ON RESTRICTIVE BUSINESS PRACTICES</td>
<td>39-45 13</td>
</tr>
<tr>
<td>IV. WIPO: REVISION OF THE PARIS CONVENTION AND TECHNOLOGY TRANSFER</td>
<td>46-47 15</td>
</tr>
<tr>
<td>V. WIPO MODEL PROVISIONS ON THE PROTECTION OF COMPUTER SOFTWARE</td>
<td>48-50 16</td>
</tr>
<tr>
<td>VI. WIPO MODEL LAW FOR DEVELOPING COUNTRIES ON INVENTIONS</td>
<td>51 17</td>
</tr>
<tr>
<td>VII. GUIDES, MODEL FORMS AND CLAUSES RELATING TO TECHNOLOGY TRANSFER</td>
<td>52-68 18</td>
</tr>
<tr>
<td>A. Completed projects</td>
<td>52-62 18</td>
</tr>
<tr>
<td>1. Handbook on the acquisition of technology by developing countries</td>
<td>52 18</td>
</tr>
<tr>
<td>2. Guidelines for evaluation of transfer of technology agreements</td>
<td>53-54 18</td>
</tr>
<tr>
<td>3. Guidelines for the acquisition of foreign technology in developing countries: with special reference to technology agreements</td>
<td>55 18</td>
</tr>
<tr>
<td>4. Licensing guide for developing countries: a guide on the legal aspects of the negotiation and preparation of industrial property licenses and technology transfer agreements appropriate to the needs of developing countries</td>
<td>56-57 19</td>
</tr>
<tr>
<td>5. Guide for use in drawing up contracts relating to the international transfer of know-how in the engineering industry</td>
<td>58 19</td>
</tr>
<tr>
<td>6. Manual on the use of consultants in developing countries</td>
<td>59 19</td>
</tr>
<tr>
<td>7. Guide for drawing up international contracts on consulting engineering including some related aspects of technical assistance</td>
<td>60 19</td>
</tr>
</tbody>
</table>
8. Manual on the establishment of industrial joint-venture agreements in developing countries ........................................... 61

9. UNIDO model form of turnkey lump sum contract for the construction of a fertilizer plant including guidelines and technical annexures

UNIDO model form of cost reimbursable contract for the construction of a fertilizer plant including guidelines and technical annexures ........................................... 62

B. On-going projects .......................................................... 63-68

1. UNIDO System of Consultations ........................................ 63-67

(a) Fertilizer industry ....................................................... 64
(b) Petrochemical industry ................................................ 65
(c) Agricultural machinery industry ..................................... 66
(d) Pharmaceutical industry ............................................... 67

2. UNIDO/ICPE joint project. ................................................ 68

VIII. ADVISORY AND INFORMATION SERVICES ................................ 69-76

A. Advisory Service on Transfer of Technology (UNCTAD) .......... 69

B. Advisory and Information Services Division (UNCTC) .......... 70

C. Technological Advisory Services (UNIDO) .......................... 71

D. Technological Information Exchange System (UNIDO) ............ 72

IX. SELECTED PUBLICATIONS ............................................... 73-76
INTRODUCTION

1. This report is one in the series of specialized reports on current activities of international organizations related to the harmonization and unification of international trade law. It deals with the activities undertaken by organizations within the United Nations system on the legal aspects of technology transfer, and is based on documentation available as at 14 December 1984. The term "technology transfer" as conceived by various United Nations organizations covers a wide field and includes the transfer of systematic knowledge, skill and techniques from the supplier of technology for the manufacture of a product, the application of a process, or the operation and maintenance of works. This technology transfer can take place through, for example, know-how agreements, licensing agreements, joint ventures, turnkey or semi-turnkey contracts, or management contracts.

2. Work within the United Nations system has concentrated on technology transfer to developing countries. Some of the major problems which developing countries face in the import of technology are the high costs involved, the imposition of restrictive terms and conditions which may militate against economic and technological development, and the absence of certain important guarantees from the supplier pertaining to the technology transferred. Some developing countries may lack experience in drafting technology transfer agreements. There is also a lack of an adequate legal framework in some developing countries for regulating the transfer of technology or conditions for its transfer.

I. CODES OF CONDUCT RELATING TO TECHNOLOGY TRANSFER

A. UNCTAD draft international code of conduct on the transfer of technology

3. By resolution 74 (X) of 18 September 1970, the United Nations Conference on Trade and Development (UNCTAD) established an Intergovernmental Group on the Transfer of Technology, which initiated work on the formulation of an international code of conduct on the transfer of technology. By its resolution 32/188 of 19 December 1977, the General Assembly decided to convene, under UNCTAD auspices, a United Nations Conference on an International Code of Conduct on the Transfer of Technology with the mandate to negotiate on the draft international code of conduct on the transfer of technology (hereinafter referred to as the draft Code), and of taking all decisions necessary for its adoption. The fifth session of the Conference was held in October/November 1983. The sixth session is scheduled for May 1985.

4. The draft Code consists of a preamble and nine chapters covering definitions and scope of application (Chapter 1), objectives and principles (Chapter 2), national regulation of transfer of technology transactions (Chapter 3), restrictive business practices (Chapter 4), responsibilities and obligations of parties (Chapter 5), special treatment for developing countries (Chapter 6), international collaboration (Chapter 7), international institutional machinery (Chapter 8), and applicable law and settlement of disputes (Chapter 9).
5. The draft Code defines technology transfer as the transfer of systematic knowledge for the manufacture of a product, for the application of a process or for the rendering of a service and does not extend to transactions involving the mere sale or mere lease of goods. 1/ Transactions involving technology transfer which are within the scope of the draft Code include sale and licensing of all forms of industrial property, provision of know-how and technical expertise and provision of technological knowledge necessary for the installation, operation and functioning of plant and equipment, and turnkey projects. 2/

6. The draft Code deals mainly with the conduct of suppliers and recipients of technology, and seeks "to establish general and equitable standards on which to base the relationships among parties to transfer of technology transactions and governments concerned, taking into consideration their legitimate interests, and giving due recognition to special needs of developing countries for the fulfilment of their economic and social development objectives." 3/

7. By the close of the fifth session of the Conference many provisions in the draft Code were resolved by the three Groups which negotiated on it, i.e. the Group of 77 (developing countries), Group B (developed market economy countries) and Group D (socialist countries). However, there were still some major issues to be resolved including restrictive business practices, the responsibilities and obligations of the parties, and the settlement of disputes. The areas of agreement or substantial agreement, as well as the outstanding issues are indicated below.

1. Some major issues: areas of agreement or substantial agreement

(a) Some aspects of restrictive business practices

8. Chapter 4 of the draft Code deals with restrictive business practices. The restrictive practices dealt with are those which are more commonly found in technology transfer agreements between enterprises from developed and developing countries. Agreement or substantial agreement has been reached on provisions dealing with the following restrictive practices (the practices are listed in the general order in which they appear in chapter 4, B. of the draft Code).

Grant-back provisions

9. The draft Code seeks to avoid grant-back provisions, i.e. provisions which would require the acquiring party to grant back to the supplying party any improvements that are made to the acquired technology, in certain circumstances. All three Groups have agreed that grant-back provisions should be avoided when they would constitute an abuse of a dominant market position.

1/ TD/CODE TOT/41, chapter 1, section 1.2. This is the most recent version of the draft Code.

2/ Ibid., chapter 1, section 1.3.

3/ Ibid., chapter 2, section 2.1(i).
of the supplying party. The outstanding issue is whether such grant-back provisions should also be avoided, as proposed by Group B, when they are on an exclusive basis either without offsetting consideration or without reciprocal obligations from the supplying party. The Group of 77 proposes that they should be avoided when they are on an exclusive basis, when there is an absence of offsetting consideration, or when there is an absence of reciprocal obligations from the supplying party.

Challenges to validity of patents

10. Subject to the appropriate applicable law and the terms of the agreement to the extent consistent with that law, the draft Code seeks to avoid practices which require the acquiring party to refrain from challenging the validity of patents and other types of protection for inventions involved in the transfer or the validity of other such grants claimed or obtained by the supplying party. Group B proposes to qualify the provision by introducing the term "unreasonably" (a qualification hereinafter referred to as the "rule of reason", see paragraph 28, below).

Exclusive dealing

11. All three Groups have agreed that practices which restrict the freedom of the acquiring party to enter into sales, representation or manufacturing agreements relating to similar or competing technologies or products or to obtain competing technology should be avoided, when such restrictions would not be needed for ensuring the achievement of legitimate interests, particularly including securing the confidentiality of the technology transferred or best effort distribution or promotional obligations.

Restrictions on research

12. The draft Code seeks to avoid practices which restrict the acquiring party either in undertaking research and development directed at adapting the transferred technology to local conditions or in initiating research and development programmes based on the transferred technology for the purpose of developing new products, processes or equipment (see paragraph 15, below). Group B and Group D propose that such restrictions should only be prohibited if they are unreasonable.

Restrictions on the use of personnel

13. The draft Code seeks to avoid practices which require the acquiring party to use personnel designated by the supplying party, except to the extent necessary to ensure an efficient transmission phase for the transfer of technology. The exception would, however, be subject to the condition that there is no adequately trained local personnel available. Group B proposes that such a requirement should only be prohibited if it is unreasonable.

Price fixing

14. The draft Code seeks to avoid practices which empower the supplying party to regulate prices to be charged by acquiring parties in the relevant market to which the technology was transferred for products manufactured or services produced using the technology supplied. Group B proposes that only price fixing which is unjustifiable be prohibited (i.e. rule of reason).
Restrictions on adaptations

15. The draft Code seeks to avoid practices which prevent the acquiring party from adapting the imported technology to local conditions or introducing innovations to it (see paragraph 12, above). It also seeks to prohibit clauses obliging the acquiring party from introducing unwanted or unnecessary design or specification changes, unless the acquiring party makes adaptations on his own responsibility and without using the technology supplying party’s name, trade or service marks or trade names. The restrictions would not apply if the adaptation would, for example, unsuitably affect those products produced by the transferred technology. Group B proposes to limit this provision to unreasonable restrictions.

Exclusive sales or representation agreements

16. All three Groups have agreed that practices which require the acquiring party to grant exclusive sales or representation rights to the supplying party or his nominees should be avoided, except in cases of subcontracting or manufacturing arrangements where the parties have agreed that all or part of the production under the technology transfer arrangement would be distributed by the supplying party or any person designated by him.

Tying arrangements

17. The draft Code seeks to avoid practices which impose on the acquiring party the acceptance of additional technology, future inventions and improvements, and goods or services not wanted by the acquiring party as a condition for obtaining the technology required. However, tying arrangements should be allowed if the supplying party has a justifiable interest in imposing such arrangements, e.g. maintaining the quality of the product or service because of the acquiring party’s use of a trade or service mark or other identifying item, or where the supplying party has to fulfil guarantees given to the acquiring party. Group B proposes that such an imposition should be prohibited only if it unduly restricts the sources of technology, goods or services, as a condition for obtaining the technology required (i.e. rule of reason).

Patent pool or cross-licensing agreements and other arrangements

18. All three Groups have agreed that patent pool or cross-licensing agreements and other international transfer of technology interchange arrangements among technology suppliers which would unduly limit access to new technological developments or which would result in an abusive domination of an industry or market with adverse effects on technology transfer should be avoided. An exception is made for those restrictions appropriate and ancillary to co-operative arrangements.

Restrictions on publicity

19. The draft Code seeks to avoid practices which restrict advertising or publicity by the acquiring party in regard to the supplying party’s trade or service marks, trade names or other identifying items except where restrictions of such publicity may be required to prevent injury to the supplying party’s good-will or reputation. Restrictions may be required, for example, where the advertising or publicity makes reference to the supplying
party's name, or where appropriate for safety purposes, or when needed to secure the confidentiality of the technology transferred. Group B proposes that such restrictions should be prohibited only if they are unreasonable.

**Payments and other obligations after expiration of industrial property rights**

20. All three Groups have agreed that practices which require payments or imposition of other obligations for continuing the use of industrial property rights which have been invalidated, cancelled or which have expired should be avoided, "recognizing that any other issue, including other payment obligations for technology, shall be dealt with by the appropriate applicable law and the terms of the agreement to the extent consistent with that law."

(b) **Responsibilities and obligations of parties**

21. Chapter 5 of the draft Code deals with the responsibilities and obligations of the parties, both in the pre-contractual phase and in the contractual phase. With the exception of two, all provisions in this chapter have been agreed to by the three Groups. In the pre-contractual phase, i.e. when the parties are negotiating the technology transfer agreement, the draft Code directs the attention of the parties to matters such as the use of locally available resources (personnel, technologies, technical skills and other resources), the rendering of technical services in the introduction and operation of the technology to be transferred, "unpackaging" of technologies (i.e. a detailed disclosure of all the elements that make up the "package", with a separate assessment of the cost for each element), the need to agree on fair and reasonable terms and conditions, non-disclosures of confidential information received from a potential supplying party and, the supply of accessories, spare parts and components by the technology supplier.

22. In the contractual phase, the draft Code directs the attention of the parties to matters such as access to improvements to the technology transferred, maintenance of confidentiality in connection with the technology transferred, dispute settlement and applicable law, guarantee that the technology is suitable for manufacturing the goods or producing the services stipulated in the agreement, the rights of the supplying party to the technology transferred, and performance guarantees.

(c) **Legal form of the draft Code**

23. The question of the legal form of the draft Code may now be regarded as settled. At the end of the fifth session of the Conference it appeared that the draft Code would be adopted in the form of a General Assembly resolution.

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4/ The provisions on confidentiality in the contractual phase of transfer of technology agreements, and on dispute settlement and applicable law. *Ibid.*, Chapter 5, section 5.4 (ii) and section 5.4 (iii) respectively.
and that a conference to review the draft Code would be convened five years after its adoption. The Code would contain a follow-up machinery which would require States which have accepted the Code to take appropriate steps at the national level to meet their commitment to it.

2. Some outstanding issues

(a) Some aspects of restrictive business practices

Export restrictions

24. Agreement has not been reached among the three Groups on the imposition of export restrictions on exportable products produced from the technology supplied. The Group of 77 proposes a prohibition on all restrictions which would prevent or hinder export by means of territorial or quantitative limitations or prior approval for export or export prices of products or increased rates of payments for exportable products. Group B proposes that the prohibition be limited to unreasonable restrictions and that restrictions would be justified, for example, whenever the restriction refers to exports of such products to countries where they are protected by the supplying party's industrial property rights, or to countries where the relevant know-how has retained its confidential character, or where the supplying party has granted to another party a licence to use the relevant technology. Group D proposes a similar justification.

Restrictions after expiration of the arrangement

25. Group B and Group D propose to protect after the expiration of the technology transfer arrangement existing industrial property rights as well as know-how which has not entered the public domain, whereas the Group of 77 proposes to forbid any restrictions on use after the agreement has expired, or after the know-how has lost its secret character.

Other proposals on restrictions

26. The Group of 77 and Group D propose six other provisions on restrictive business practices to be included in the draft Code. These deal with limitations on the volume or scope of production by the acquiring party, the use of quality controls by the acquiring party, the obligation to use trade marks, the requirement to provide equity or participate in management, unlimited or unduly long duration of arrangements, and limitations upon use of technology already imported by the acquiring party.

(b) Criteria for application of restrictive business practices

27. It is generally agreed by the three Groups that some criteria should govern the application of restrictive business practices in chapter 4. It has

5/ Ibid., appendix A.

6/ Ibid., appendix D; see, also, TD/CODE TOT/38.

7/ Ibid., appendix D.
been suggested that, subject to the other provisions of the chapter, the draft Code should state that the restrictive business practices described in the chapter should be avoided in international transfer of technology transactions. It has also been suggested that whether a practice should be avoided in an individual case should depend on an evaluation of the over-all purposes of the transaction, the effects of the parties on the economic and technological development of the acquiring country, the competitive situation in the relevant market, the interests of the parties, the situation prevailing at the inception of the arrangement, and all other relevant circumstances. It has also been suggested that restrictive business practices between related parties (i.e. between parent and subsidiary companies) should be evaluated in the light of their special relationship. These criteria have not been fully settled. 8/ The areas of disagreement are set forth below.

"Rule of reason" approach compared with "adversely hindering economic and technological development" approach

28. Restrictive business practices may have a tendency to restrict trade, or have an anti-competitive effect. Group B proposes to introduce the "rule of reason" (the use of such terms as "unreasonably", "unjustifiably" and "unduly") into some of the provisions of the draft Code (chapter 4, B.2, 4, 5, 6, 7, 9, 10 and 12). Under this approach, a case by case consideration is envisaged and a restrictive business practice is permitted if it is reasonable, justifiable, or if it is not unduly restrictive. The Group of 77 approach to judging restrictive business practices is based on whether such practices adversely affect the international flow of technology by, for example, hindering the economic and technological development of acquiring parties.

Commonly owned enterprises

29. Another issue concerns the transfer of technology between two companies in common ownership. The position of the Group of 77 is that practices and restrictions between commonly owned enterprises should be examined in the light of the rules, exceptions and factors applicable to all transfer of technology transactions. Such practices may be considered as not contrary to the provisions of the draft Code when they would otherwise be acceptable and would not adversely affect the transfer of technology. 9/ According to Group B, restrictions for the purpose of rationalization or reasonable allocation of functions between parent and subsidiary or among enterprises belonging to the same concern would normally be considered not contrary to the draft Code unless they constitute an abuse of a dominant position of market power within the relevant market, for example, unreasonable restraint of the trade of a competing enterprise.

(c) Confidentiality

30. The transfer of technology may require the disclosure of confidential information. Group B proposes that there should be respect for the confidentiality and proprietary nature, and the use only for the purposes and

8/ Ibid., appendices A and D.
9/ Ibid., appendix D.
on terms stipulated in the agreement of any trade secrets, secret know-how and all other confidential information received from the other party in connection with the transfer of technology. The Group of 77 considers that confidentiality should not extend beyond an adequate lapse of time after the transmission of each item of secret information. Group D considers that this obligation should end after the trade secrets, secret know-how and other confidential information received have entered the public domain independently of the acquiring party. At the fifth session of the Conference, the text for consideration on the provision on confidentiality (chapter 5, section 5.4 (ii)) in the contractual phase of transfer of technology agreements was: "Maintenance of confidentiality including its scope and duration and the use of any assets like trade secrets, secret know-how and all other confidential information received from the other party in connection with the transfer of technology." No agreement was reached on this text. 10/

(d) Definition of an "international" transfer of technology

31. While it is clearly agreed that the draft Code applies to transactions across national boundaries, there is disagreement among the three Groups on the extent to which the provisions of the draft Code should apply to transactions within national boundaries that might have an international content. 11/ Group B proposes that States could, by means of national legislation, apply the principles of the draft Code to technology transactions within their national boundaries. The Group of 77 and Group D propose that the draft Code should apply to transactions between parties which reside or are established in the same country, if in the latter case at least one of the parties is directly or indirectly controlled by a foreign entity and the technology transferred has not been developed in the acquiring country by the supplying party.

(e) Applicable law and settlement of disputes

32. The text on applicable law and settlement of disputes, contained in chapter 9, has not been agreed. The elements that may be included in this chapter are choice of law, amicable way of settling disputes or differences between parties, resort to arbitration, encouragement of the use of internationally accepted rules of arbitration, such as the UNCITRAL Arbitration Rules, recognition and enforcement of arbitral awards.

B. UNCTC draft code of conduct on transnational corporations

33. Transnational corporations have been important agents in the generation, application and international transfer of technology. Much of the technology relevant for the economic and industrial development of developing countries belongs to transnational corporations. Work by the United Nations Commission on Transnational Corporations (UNCTC) on a draft United Nations code of conduct on transnational corporations 12/ (hereinafter referred to as the UNCTC draft Code) is still in progress.

10/ Ibid., appendix A.

11/ Ibid., chapter 1, section 1.4; see, also, appendices A and C.

34. The UNCTC draft Code is to consist of six main parts. The first part, which has not yet been drafted, is to contain a preamble and a statement of objectives. The second part consists of a set of provisions on definitions and scope of application. The third part deals with the activities of transnational corporations, and specifies the kinds of conduct that are deemed permissible. The fourth part deals with the treatment that transnational corporations are to receive from the Governments of the countries in which they operate. The fifth part addresses the necessary co-operation among Governments for the application of the draft Code, while the sixth part deals more specifically with the action needed at the national and international levels for the implementation of the draft Code.

35. The Intergovernmental Working Group on the Code of Conduct, and the Commission on Transnational Corporations at its special session held in June 1984, agreed that the UNCTC draft Code should deal, in an appropriate manner, with competition and restrictive business practices, and transfer of technology. 13/ It was agreed that, in so far as competitive and restrictive business practices were concerned, the following formula would be appropriate: 14/

"For the purposes of this Code, the relevant provisions of the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices adopted by the General Assembly in its resolution 35/63 of 5 December 1980 shall/should also apply in the field of restrictive business practices." (See Section IX, below.)

36. Agreement has not been reached on the manner in which the UNCTC draft Code should deal with the question of transfer of technology. One suggested proposal is to include substantive provisions reflecting three ideas. 15/ First, transnational corporations should conform to the transfer of technology laws and regulations of the countries in which they operate, and co-operate with the competent authorities of those countries in assessing the impact of international transfers of technology on their economies and also consult with them regarding the various technological options which might help those countries, particularly developing countries, to attain their economic and social development. Secondly, transnational corporations in their transfer of technology transactions, including intra-corporate transactions, should avoid practices which adversely affect the international flow of technology, or otherwise hinder the economic and technological development of countries, particularly developing countries. Thirdly, transnational corporations should contribute to the strengthening of the scientific and technological capacities of developing countries. Transnational corporations should also undertake substantial research and development activities in developing countries and make full use of local resources and personnel in this process.


14/ Ibid., para. 62.

15/ E/C.10/1982/6, para. 36; see, also, E/C.10/1984/S/5, para. 63.
37. Another proposal is to adopt the relevant provisions of the UNCTAD draft Code (see Section A, above), with the following formula: "For the purposes of this Code the relevant provisions of the International Code of Conduct on the Transfer of Technology adopted by the General Assembly in its resolution ... of ... shall/should apply in the field of transfer of technology."

II. DECLARATION OF PRINCIPLES AND RULES ON RESTRICTIVE BUSINESS PRACTICES

38. The General Assembly, by its resolution 35/63 of 5 December 1980, adopted the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices (hereinafter referred to as the Set of Principles and Rules). While the Set of Principles and Rules does not make specific reference to technology transfer, a number of these Principles and Rules could be regarded as relevant to technology transfer. Part IV, section D of the Set of Principles and Rules provides that enterprises should refrain from certain acts or behaviour in a relevant market when, through an abuse or acquisition and abuse of a dominant position of market power, they limit access to markets or otherwise unduly restrain competition, having or being likely to have adverse effects on international trade, particularly that of developing countries, and on the economic development of these countries. For example, Part IV, section D4e calls upon enterprises to refrain from imposing restrictions on the importation of goods which have been legitimately marked abroad with a trademark identical or similar to the trademark protected as to similar goods in the importing country where the trademarks are of the same origin, i.e. belong to the same owner or used by enterprises between which there is economic, organizational or legal interdependence and where the purpose of such restrictions is to maintain artificially high prices. Part IV, section D4f (iii) calls upon enterprises not to impose restrictions concerning where, or to whom, or in what form or quantities, goods supplied or other goods may be resold or exported by enterprises. At the twenty-eighth session of the Intergovernmental Group on Restrictive Business Practices in March 1984, it agreed to recommend that a United Nations Conference on Restrictive Business Practices be convened in 1985 to review all aspects of the Set of Principles and Rules.

III. UNCTAD DRAFT MODEL LAW ON RESTRICTIVE BUSINESS PRACTICES

39. The UNCTAD draft model law on restrictive business practices was prepared by the UNCTAD secretariat, and was first considered by the Third Ad Hoc Group of Experts on Restrictive Business Practices. 16/ Subsequently, a revised draft 17/ was examined by an Intergovernmental Group of Experts on Restrictive Business Practices in November 1983. Another revised draft entitled


17/ TD/B/RBP/15.
"Consideration of the revised draft of a model law or laws on restrictive business practices: elements for provisions of a model law on restrictive business practices". 18/ was considered by the Intergovernmental Group of Experts on Restrictive Business Practices in November 1984. 19/ Some of the elements of this draft are set forth below.

Objectives or purpose of the law

40. The objectives or purpose of the model law are to eliminate or effectively deal with acts or behaviour of enterprises which, through an abuse or acquisition and abuse of a dominant position of market power, limit access to markets or otherwise unduly restrain competition in such a way as to have or be likely to have adverse effects on trade or economic development.

Scope of application

41. The draft model law applies to all enterprises as defined by it and to such transactions in goods and services, and restrictive business practices falling within its scope. It does not apply to agreements entered into by a State, or to practices directly caused by such agreements.

Restrictive agreements or arrangements

42. The law should include a prohibition (except when enterprises deal with each other in the context of an economic entity wherein they are under common control) on the enterprises engaging in practices of the type listed below when:

- Enterprises are engaged in the market in rival or potentially rival activities;
- The practices arise through formal, informal, written or unwritten agreements or arrangements;
- The practices limit access to markets or otherwise unduly restrain competition, having or being likely to have adverse effects on trade or economic development.

Acts or behaviour in an abuse or acquisition and abuse of a dominant position of market power

43. The law should include a prohibition on acts or behaviour in an abuse, or acquisition and abuse, of a dominant position of market power:

- When the acts or behaviour take place in a relevant market;
- Where an enterprise, either by itself or acting together with a few other enterprises, is in a position to control the relevant market for a particular good or service, or groups of goods or services;

18/ TD/B/RBP/15/Rev.1.
19/ See, TD/B/RBP/L.16/Add.4.
When the acts or behaviour limit access to markets or otherwise unduly restrain competition having or being likely to have adverse effects on trade or economic development.

Some possible aspects of consumer protection

44. The law should include a prohibition on enterprises engaging in practices, such as the following:

- When engaged in the manufacture or importation of products, failing to ensure an adequate supply of spare parts and replacements, or failing to maintain an adequate after-sales service for consumers, except for reasons outside their control;

- Declining liability for defective products or services rendered not meeting the supplier's description of such goods and services;

- In connection with the supply of products or services, making any warranty: (i) limited to a particular geographic area or sales point; (ii) falsely representing that products are of a particular style or model; (iii) falsely representing that the goods are new or of a specified age; (iv) representing that products or services have any sponsorship, approval, performance and quality characteristics, components, materials, accessories, uses or benefits which they do not have.

Functions and powers of the administering authority

45. The model law makes provision for an Administering Authority to be created. The functions and powers of the Authority may include the following:

- To make inquiries and investigations, including inquiries and investigations as a result of receipt of complaints;

- To make the necessary decisions, including the imposition of sanctions;

- To issue forms and maintain a register for notifications;

- To make regulations;

- To assist in the preparation of new, or the amending of, legislation on restrictive business practices.

IV. WIPO: REVISION OF THE PARIS CONVENTION AND TECHNOLOGY TRANSFER

46. Developing countries have made two proposals to revise the Convention of Paris for the protection of industrial property, 1883, 20/ which may affect the transfer of technology to developing countries. The first proposal deals

with the right of any developing country to provide for the automatic
forfeiture or revocation of a patent where a patented invention is not worked
or is insufficiently worked after a certain period from the grant of the
patent. The second proposal gives the right to a country where an invention
has been patented to grant temporary exclusive compulsory licences where a
patented invention has not been worked or has been insufficiently worked.
Thus, a particular Government could grant an exclusive compulsory licence
independently of the patent owner. Such an exclusive compulsory licence would
prevent the patent owner from working the invention in the country in which
the licence is granted. Furthermore, once an exclusive compulsory licence is
granted, the owner of the patent cannot import into the country where the
patent is being worked by the licensee, products resulting from the working of
the patent elsewhere.

47. The concerns which led to the proposals are that patent holders sometimes
use their patents to monopolize the importation of products into developing
countries, and to maintain at a high level the price of such products. Under
the proposals, the Government of a developing country could not only threaten
an owner with forfeiture of his patent, but could further grant an exclusive
licence under the owner's patent, and thereby exclude the patent owner from
the market. However, a possible result of the implementation of the proposal
may be that a developed country may not apply for a patent in a country which
applies such provisions and there would therefore be no chance of working the
patent in that country. No agreement was reached at the fourth session (1984)
of the diplomatic Conference on the Revision of the Paris Convention for the
Protection of Industrial Property.

V. WIPO MODEL PROVISIONS ON THE PROTECTION
OF COMPUTER SOFTWARE

48. The WIPO Model provisions on the protection of computer software
(hereinafter referred to as the draft Model) \(^{21/}\) are intended to provide an
appropriate form of legal protection for computer programs with a view to
facilitating the access of developing countries to information on computer
software. "Computer software" is defined in section 1 of the draft Model and
means any or several of the following items: a computer program, a program
description or supporting material. These items are defined as follows:

"(i) 'computer program' means a set of instructions capable, when
incorporated in a machine-readable medium, of causing a machine
having information-processing capabilities to indicate, perform or
achieve a particular function, task or result;

"(ii) 'program description' means a complete procedural presentation in
verbal, schematic or other form, in sufficient detail to determine a
set of instructions constituting a corresponding computer program;

"(iii) 'supporting material' means any material, other than a computer
program or a program description, created for aiding the
understanding or application of a computer program, for example
problem descriptions and user instructions."

\(^{21/}\) WIPO Publication No. 814(E); 1978, WIPO, Geneva.
49. Section 5 of the draft Model provides for the type of protection needed for computer software. The owner of rights in computer software could, for example, prevent any person from: disclosing the computer software or facilitating its disclosure to any person before it is made accessible to the public; allowing or aiding someone to have access to any apparatus storing or reproducing the computer software before the computer software is made public; copying of any forms of computer software; or using the computer program to produce the same or a substantially similar computer program or a program description of the computer program or of a substantially similar computer program. Furthermore, the draft Model permits the owner to prevent the actual use of a computer program to control a machine with information-processing capabilities and to prevent the sale, lease or licensing of computer software or objects storing the software. Other provisions deal with infringements, duration of rights, relief, and application of other laws.

50. A Committee of Experts on the Legal Protection of Computer Software met in June 1983 to deliberate on the draft Model. The Committee considered it at present premature to take a stand on the question of the best form for the international protection of computer software and recommended that the consideration of the conclusion of a special treaty as presented should not be pursued for the time being.

VI. WIPO MODEL LAW FOR DEVELOPING COUNTRIES ON INVENTIONS

51. The WIPO model law for developing countries on inventions (in two volumes), is a revision of an earlier version published in 1965 by its predecessor, the United International Bureaux for the Protection of Intellectual Property (BIRPI). The Model law is intended to be a model for a national law but could be equally adapted for a regional law for the protection of inventions. According to the preamble of the Model law, one of the basic conditions for creating new technology or adapting existing technology to the needs of the country and for having access to foreign technology is the establishment of an appropriate legal and administrative framework for the promotion of inventiveness. The protection of inventions and the remuneration of innovations are considered to be important elements of such a framework. Volume I of the Model law entitled Patents contains model provisions, followed by a commentary, and modal regulations on patents. Volume II entitled Know-how; examination and registration of contracts; inventors certificates; technovations; transfer of technology, deals with those topics mentioned in the title, and is structured along the same lines as that in volume I, i.e. it contains model provisions followed by a commentary, and model regulations.

22/ LPC5/11/6.

23/ WIPO model law for developing countries on inventions, Vol. I, Patents, WIPO Publication No. 840(E); 1979, WIPO, Geneva: Vol. II, Know-how; examination and registration of contracts; inventors certificates; technovations; transfer of technology, WIPO Publication No. 841(E); 1980, WIPO, Geneva.
VII. GUIDES, MODEL FORMS AND CLAUSES RELATING TO TECHNOLOGY TRANSFER

A. Completed projects

1. Handbook on the acquisition of technology by developing countries
   (UNCTAD/TT/AS/5; E.78.II.D/15, 1978, United Nations, Geneva)

52. The UNCTAD Handbook deals with the acquisition of technology by developing countries and, according to the Preface, it is complementary to the WIPO Licensing guide for developing countries (see paragraph 56, below). The Handbook includes topics on development and technology, range of options in acquiring technology, international technology transactions, objectives in negotiations, acquiring technology through foreign investment, acquiring technology through public sector enterprises, the costs of acquiring technology, the development of domestic technological capabilities, institutional arrangements and national legislative framework.

2. Guidelines for evaluation of transfer of technology agreements
   (Development and Transfer of Technology Series, No. 12, ID/233, 1979, United Nations, New York)

53. The United Nations Industrial Development Organization (UNIDO) Guidelines are intended to provide the business community and governments in developing countries with a comprehensive text as an aid in dealing with technology transfer transactions. They provide practical information on the preparation and negotiation of various technology transfer agreements. This volume is an extension of an earlier publication, Guidelines for the acquisition of foreign technology in developing countries (see paragraph 55, below).

54. The Guidelines examine several types of technology transfer agreements relating to technical assistance, patents, know-how, engineering services, trade marks and franchises. Suggestions are made as to how the acquirer of technology might derive the maximum benefit from such agreements. Suggestions are also made as to how national agencies regulating technology transfer agreements might regulate such agreements so as to benefit the national economy. Considerable attention is paid to the subject of process performance guarantees, and methods of evaluation of these agreements are outlined. Also included are the techniques for evaluating the price of technology and information on the legal and administrative provisions in technology agreements.

3. Guidelines for the acquisition of foreign technology in developing countries: with special reference to technology agreements
   (ID/98; E.73.II.B.1, 1973, United Nations, New York)

55. The UNIDO Guidelines deal with transfer of technology to developing countries through the licensing mechanism. They deal with general trends in the transfer of technology to developing countries and the principal objectives of the transfer. They also discuss the various channels for acquiring foreign technology, and the problems facing developing countries in selecting a particular technology as well as selecting the licensor or other supplier of technology. A check list for licensees negotiating technology license agreements is included.
4. Licensing guide for developing countries: a guide on the legal aspects of the negotiation and preparation of industrial property licenses and technology transfer agreements appropriate to the needs of developing countries (WIPO Publication No. 620(E); 1977, WIPO, Geneva)

56. The purpose of the WIPO Guide is to give practical help with the legal aspects of the negotiation and the preparation of industrial property licences and technology transfer agreements appropriate to the needs of developing countries. It identifies the legal questions which arise in such licences and agreements and draws attention to features which may be detrimental to licensees or technology recipients, and suggests possible solutions. It contains illustrative clauses which may assist in the drafting of licensing agreements.

57. Among the topics included in the Guide are the scope of the licence, some aspects concerning patents, know-how, technical services and assistance, compensation, consideration, price, remuneration, royalties and fees, settlement of payment, most favourable terms and conditions, and settlement of disputes. The Guide is currently being revised.

5. Guide for use in drawing up contracts relating to the international transfer of know-how in the engineering industry (TRADE/222/Rev.1; E.70.II.E.15, 1970, United Nations, New York)

58. The Economic Commission for Europe (ECE) Guide is intended to facilitate the drawing up of contracts relating to the international transfer of know-how in the engineering industry. It draws attention to certain problems pertaining to this type of contract.


59. The primary aim of this UNIDO Manual is to provide background information on the selection and effective use of consulting services and also the types of contract forms commonly used. Among the topics covered are contracting procedures, consulting fees, the client-consultant relationship, the local consulting profession in developing countries, technological services, management services, and training programmes.


60. The ECE Guide deals with consulting engineering and some aspects of technical assistance related to consulting engineering. The purpose of the Guide is to assist in the drawing up of international contracts in this field by drawing attention to the main clauses found in such contracts.


61. This UNIDO Manual deals with a number of major issues confronting the host country partners in the negotiation and execution of joint-venture
agreements. Among the topics covered are patent licensing arrangements and technical information, technical assistance and know-how.

9. UNIDO model form of turnkey lump sum contract for the construction of a fertilizer plant including guidelines and technical annexures (UNIDO/PC.25/Rev.1, 1983, UNIDO, Vienna)

UNIDO model form of cost reimbursable contract for the construction of a fertilizer plant including guidelines and technical annexures (UNIDO/PC.26/Rev.1, 1983, UNIDO, Vienna)

62. The UNIDO Model on turnkey lump sum contract, and the UNIDO Model on cost reimbursable contract cover the rights and obligations of the parties in a turnkey contract, and a cost reimbursable contract, respectively, for a fertilizer plant. They are tailored to the special requirements and problems of developing countries, and contain model provisions for most of the clauses commonly found in such contracts.

B. On-going projects

1. UNIDO System of Consultations

63. The UNIDO System of Consultations is designed to assist developing countries in accelerating their industrialization and in achieving a more equitable share of industrial activity. Pursuant to the objective of the System of Consultations, the UNIDO secretariat is preparing some model forms of contracts, and "items" to be included in contractual arrangements in certain industrial sectors. Below is a list of various models and "items" that are intended to assist the recipient of technology in developing countries to draft and negotiate transfer of technology arrangements in various industrial sectors which would ensure a balance of interests between the parties.

(a) Fertilizer industry

64. The First Consultation on the Fertilizer Industry held in 1977 recommended that UNIDO examine contracts which would ensure the successful construction and operation of fertilizer plants (see, e.g. the turnkey contract, paragraph 62, above). Pursuant to this recommendation the following models are being prepared:

- "Second draft of the UNIDO model form of semi-turnkey contract for the construction of a fertilizer plant including guidelines and technical annexures" (UNIDO/PC.74 (1983)).

- "Second draft of the UNIDO model form of licensing and engineering services agreement for the construction of a fertilizer plant including guidelines and technical annexures" (UNIDO/PC.73 (1983)).

(b) Petrochemical industry

65. The First Consultation on the Petrochemical Industry held in 1979 recommended that UNIDO prepare a model form of agreement for the licensing of
patents and know-how in the petrochemical industry, and a set of guidelines on its use. Pursuant to this recommendation the UNIDO secretariat is preparing a model form, the latest version of which is entitled "UNIDO model form of agreement for the licensing of patents and know-how in the petrochemical industry, including annexures, an integrated commentary and alternative texts of some clauses" (UNIDO/PC.50/Rev.1 (1983)).

(c) Agricultural machinery industry

66. One of the recommendations of the First Consultation on the Agricultural Machinery Industry held in 1979 was to prepare model contracts dealing with licensing for local manufacture and joint ventures, taking into account, wherever appropriate, the model contracts under preparation within the framework of the UNIDO System of Consultations. Pursuant to this recommendation the UNIDO secretariat has prepared a draft document entitled "Items to be included in model contracts for the import, assembly and manufacture of agricultural equipment including training; model licensing agreement" (ID/WG.400/2 (1983)).

(d) Pharmaceutical industry

67. In accordance with recommendation No.2 of the First Consultation on the Pharmaceutical Industry held in 1980, the UNIDO secretariat has prepared the following documents:

- "Items which could be incorporated in contractual arrangements for the transfer of technology for the manufacture of those bulk drugs/intermediates included in UNIDO's illustrative list" (ID/WG.393/1 (1983)).

- "Items which could be included in licensing arrangements for the transfer of technology for the formulation of pharmaceutical dosage forms" (ID/WG.393/3 (1983)).

- "Items which could be included in contractual arrangements for the setting up of a plant for the production of bulk drugs (or intermediates) included in UNIDO illustrative list" (ID/WG.393/4 (1983)).

2. UNIDO/ICPE joint project

68. In 1980 the secretariat of UNIDO and of the International Centre for Public Enterprises in Developing Countries (ICPE) embarked on a joint project for the preparation of a guide dealing with warranty and guaranty issues in technology transfer transactions. Pursuant to this decision a draft document entitled "Guide on guaranty and warranty provisions in technology transfer transactions, particularly for developing countries" has been prepared. It deals with the meaning and scope of guaranty/warranty provisions in modern complex technology agreements, approaches to drafting such provisions and measures to be taken if the guaranty or warranty is not met. Furthermore, the draft Guide provides illustrations of guarantee provisions.
VIII. ADVISORY AND INFORMATION SERVICES

A. Advisory Service on Transfer of Technology (UNCTAD)

69. The Advisory Service on Transfer of Technology provides the necessary institutional basis for co-operating with developing countries and assisting them in matters pertaining to the transfer and development of technology. It provides advice on, inter alia, the formulation of laws and regulations aiming at the technological transformation of developing countries.

B. Advisory and Information Services Division (UNCTC)

70. The Advisory and Information Services Division provides advisory services and information to requesting governments on matters such as foreign investment policies, laws and regulations, the evaluation and screening of investment and technology acquisition proposals, contractual arrangements and other matters related to transnational corporations.

C. Technological Advisory Services (UNIDO)

71. The Technological Advisory Services provides a specialized advisory service to Governments of developing countries in contracting for industrial projects, particularly in the preparation for negotiation of contracts in the field of joint ventures, turnkey deliveries, licences, know-how, management and franchising services, including financial arrangements. It also assists in the drafting of these agreements.

D. Technological Information Exchange System (UNIDO)

72. The Technological Information Exchange System provides data on terms and conditions of licensing, know-how and technical assistance agreements entered into by developing countries participating in the System. Through this System, the central bodies regulating the transfer of technology in participating countries obtain valuable information, both on terms and conditions of the import of technology, and also comparable data as to their own performance.

IX. SELECTED PUBLICATIONS

73. In addition to the guides, model forms and clauses referred to in section VII, above, the following publications deal with some general legal aspects relating to technology transfer:

UNCTAD

- The role of the patent system in the transfer of technology to developing countries, TD/B/AC.11/19/Rev.1 (1975)

- Review of major developments in the area of restrictive business practices, TD/B/C.2/159 (1975)
- Information for the effective control of restrictive business practices affecting the trade and development of developing countries and the role of UNCTAD in the collection and dissemination of information, TD/B/C.2/AC.6/6 and Corr.1 (1977)

- Recent developments in the control of restrictive business practices in Latin America, TD/B/C.2/AC.6/17 (1978)

- The role of trade marks in developing countries (in co-ordination with WIPO), TD/B/C.6/AC.3/3/Rev.1 (1979)

- Restrictive business practices affecting international trade, particularly that of developing countries, and the economic development of these countries, TD/RBP/CONF.2 (1979)


- Annual report on legislative and other developments in developed and developing countries in the control of restrictive business practices, TD/B/RBP/11 (1982)

- Control of restrictive practices in transfer of technology transactions: selected principal regulations, policy guidelines and case law at the national and regional levels, TD/B/C.6/72 (1982)

- Organizational forms of transfer of technology to developing countries by small and medium-sized enterprises: a case study of equity joint ventures and technology agreements in Latin America, TD/B/C.6/77 (1982)

- Compilation of legal material dealing with transfer and development of technology, TD/B/C.6/81 (1982)

- Restructuring the legal environment: international transfer of technology. Common approaches to laws and regulations on the transfer of and acquisition of technology, TD/B/C.6/91 (1982)

- Tied purchasing, TD/B/RBP/18 (1984)

- Restrictive business practices in the services sector by consulting firms and other enterprises in relation to the design and manufacture of plant and equipment, TD/B/RBP/19 (1984)

UNIDO

- Guidelines for contracting for industrial projects in developing countries, ID/149; E.75.11.B.3, 1975, United Nations, New York

Relevant issues to be taken into account when negotiating transfer of technology, ID/WG.331/2 (1980)

Background paper for discussion on the relevant issues to be taken into account when negotiating transfer of technology agreements and the various terms, conditions and variations thereof that could be included in contractual agreements: possible scope, structure and content, UNIDO/PC.19 (1981)

Review of systems for regulating technology inflows in selected developing countries, UNIDO/IS.253 (1981)

Licensing computer software: basic considerations as to the protection and licensing of computer software and its implications for developing countries, ID/WG.383/3 (1982)

Guidelines for the establishment of industrial joint-ventures in developing countries, UNIDO/IS.361 (1982)

Restrictive clauses in licensing agreements in the pharmaceutical industry, ID/WG.405/5 (1983)

74. The following reports on licensing and transfer of technology agreements were submitted to the Regional Workshop on Technology Acquisition through Licensing Agreements by Exchange of Experience between Selected Developing Countries in Asia and the Far East, under the auspices of UNIDO, in 1975:

- Essential preparations for international licensing, ID/WG.206/1
- Review of legislative and administrative systems for the regulation of technology transfer agreements, ID/WG.206/2
- Restrictive business practices in licensing agreements, ID/WG.206/3
- Selection of technology and its adaptation - Japanese experience, ID/WG.206/4
- Licensing, turn-key and joint venture contracts, ID/WG.206/5
- Acquiring technology for metallurgical industries, ID/WG.206/6
- Contractual arrangements and policy aspects in technology licensing, ID/WG.206/7
- Preparation of licence agreements and negotiating strategy, ID/WG.206/8

75. The following reports were submitted to the High-Level Policy Meeting of ASEAN on the Regulation of Technology Transfer, under the auspices of UNIDO, in 1981:

- Technology transfer - Malaysia's experience, ID/WG.349/2
- Philippine experience in technology transfer regulation, ID/WG.349/3
76. The following reports were submitted to a UNIDO/LES Joint Meeting on Problems on Licensing in Developing Countries, under the auspices of UNIDO, in 1982:

- Overview of selected problems of technology transfer to developing countries, ID/WG.388/1
- Acquisition of foreign technology in Egypt: a new approach, ID/WG.388/2
- Technology transfer by Portugal: an overview, ID/WG.383/3
- Observations regarding the transfer of technology in Spain, ID/WG.388/4
- Policy, procedures and problems regarding import of technology by India, ID/WG.388/5

UNCTC

- Measures strengthening the negotiating capacity of governments in their relations with transnational corporations: technology transfer through transnational corporations, ST/CTC/47; 83.II.A.19, 1983, United Nations, New York
- National legislation and regulations relating to transnational corporations, ST/CTC/26 (1983)

United Nations Institute for Training and Research (UNITAR)

- The international transfer of commercial technology of developing countries, Unitar Research Report, No. 13, UNITAR, 1979, United Nations, New York

Economic Commission for Europe (ECE)

- The guide on drawing up international contracts for industrial co-operation, ECE/TRADE/124; E.76.II.E.14, 1976, United Nations, New York
Economic and Social Commission for Asia and the Pacific (ESCAP)

- ESCAP guidelines for development of industrial technology in Asia and the Pacific, E/CN.11/1273, 1976, United Nations, Bangkok

WIPO - LAWASIA

- WIPO-LAWASIA seminar on industrial property, WIPO Publication No. 647 (E); 1983, WIPO, Geneva